



YEARLY STATUS REPORT - 2020-2021

Part A

Data of the Institution

1.Name of the Institution		ADITYA ENGINEERING COLLEGE
• Name of the Head of the institution	Dr. M. Sreenivasa Reddy	
• Designation	Principal	
• Does the institution function from its own campus?	Yes	
• Phone No. of the Principal	9949876662	
• Alternate phone No.	9949876662	
• Mobile No. (Principal)	9949876662	
• Registered e-mail ID (Principal)	principal@aec.edu.in	
• Address	Surampalem	
• City/Town	East Godavari	
• State/UT	Andhra Pradesh	
• Pin Code	533437	
2.Institutional status		
• Autonomous Status (Provide the date of conferment of Autonomy)	08/03/2017	
• Type of Institution	Co-education	
• Location	Rural	

• Financial Status	Self-financing				
• Name of the IQAC Co-ordinator/Director	Dr.G.Suresh				
• Phone No.	7036266664				
• Mobile No:	7036266664				
• IQAC e-mail ID	dean_sb@aec.edu.in				
3.Website address (Web link of the AQAR (Previous Academic Year)	http://aec.edu.in/AQAR/AQAR_2019-20.pdf				
4.Was the Academic Calendar prepared for that year?	Yes				
• if yes, whether it is uploaded in the Institutional website Web link:	https://aec.edu.in/?p=Academic-Calenders				
5.Accreditation Details					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A	3.11	2015	01/05/2015	31/12/2022
6.Date of Establishment of IQAC			15/11/2011		
7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?					
Institution/ Department/Faculty/School	Scheme	Funding Agency	Year of Award with Duration	Amount	
Nil	Nil	Nil	Nil	Nil	
8.Provide details regarding the composition of the IQAC:					
• Upload the latest notification regarding the composition of the IQAC by the HEI	View File				
9.No. of IQAC meetings held during the year	5				
• Were the minutes of IQAC meeting(s) and compliance to the decisions taken	Yes				

uploaded on the institutional website?		
<ul style="list-style-type: none"> If No, please upload the minutes of the meeting(s) and Action Taken Report 	No File Uploaded	
10. Did IQAC receive funding from any funding agency to support its activities during the year?	No	
<ul style="list-style-type: none"> If yes, mention the amount 		
11. Significant contributions made by IQAC during the current year (maximum five bullets)		
<ul style="list-style-type: none"> Orientation programme on research methodologies is conducted online to improve research publications. Classwork, placement training and internships are conducted online in view of the COVID-19 pandemic. Development of e-content for various courses is implemented Encouraged students and staff to complete at least one course through Coursera Platform. Professional development programmes are conducted online for non-teaching staff. 		
12. Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:		

Plan of Action	Achievements/Outcomes
<ul style="list-style-type: none"> • Conducting orientation programmes on research methodologies and intellectual property rights (IPR) to improve research publications. 	<p>Two orientation programmes on research methodologies and intellectual property rights (IPR) are successfully completed. The total number of publications is increased by 30% compared to the previous year</p>
<ul style="list-style-type: none"> • Implementing online Classwork, placement training and internships in view of the COVID-19 pandemic 	<p>Classwork, placement training and internships through online are successfully implemented. Totally 536 students have undergone internships. The campus recruitment training program is conducted for the students and 861 students are placed in reputed companies. e-content for ten courses is successfully developed</p>
<ul style="list-style-type: none"> • Developing e-content for various courses 	<p>e-content for ten courses is successfully developed</p>
<ul style="list-style-type: none"> • Encouraging the students and staff to complete at least one course through the MOOCs Platform 	<p>Students and faculty are actively registered for courses on the MOOCs platform. Totally 677 students completed the courses successfully.</p>
<ul style="list-style-type: none"> • Conducting professional development programmes for non-teaching staff 	<p>Twelve professional development programmes are conducted online for non-teaching staff.</p>
<p>13. Was the AQAR placed before the statutory body?</p>	<p>Yes</p>
<ul style="list-style-type: none"> • Name of the statutory body 	
<p>Name of the statutory body</p>	<p>Date of meeting(s)</p>
<p>ACADEMIC COUNCIL</p>	<p>09/10/2021</p>
<p>14. Was the institutional data submitted to AISHE ?</p>	<p>Yes</p>

- Year

Year	Date of Submission
2020-21	24/02/2022

15. Multidisciplinary / interdisciplinary

In view with the current changing trends in technology, the institute incorporated interdisciplinary/multi-disciplinary courses into the curriculum. As proposed by the model curriculum of AICTE, the institute integrates various interdisciplinary courses into the curriculum via basic science courses, humanities and social science courses, engineering science courses and management courses. students are extensively trained in new age skills through various skill development activities.

16. Academic bank of credits (ABC):

17. Skill development:

As new age skills are required for employability, the institute initiated various skill development programs through internal training division technical hub, Andhra Pradesh state skill development centre. students are encouraged to participate in various skill development activities through these centres resulting in certifications which help the students to secure employment.

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

The institute incorporated Essence of Indian Traditional Knowledge as a mandatory course into the curriculum through which students are exposed to need and importance of protecting indian traditional knowledge related to science, engineering, agriculture and medicine. Apart from this, students are sensitised in universal human values during the induction program.

19. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

The institute is committed to create, sustain and improve the learning process through total quality management and create itself a position in scientific and technological learning. The institute strives to attain these objectives through continuous improvement and team work. The priority and thrust area of the institute is

implementation of outcome based education in teaching-learning as it forms the integral part. As OBE is need of the hour, the institute focussed on training all the faculty members on outcome based education to achieve a paradigm shift from the teacher centric education system. Accordingly, there is a need to define, develop, implement and measure student learning through the attainment of various outcomes ensuring graduating engineers from all programs demonstrate expected skill and competency. Achieving this is a challenging task and required participation of all stakeholders in the design of curriculum. The institute in coordination with all the stakeholders adopted the OBE model for attainment of Graduate Attributes. The institute strives to make the students accomplish Graduate Attributes by focusing on the following thrust areas:

Academic excellence:

The curriculum is designed to encourage analytical and problem solving skills. Emerging technology courses like Data Science, Internet of Things and Robotics are introduced in to the curriculum. Usage of online tools for teaching learning is increased significantly. Faculty and students are encouraged to complete certification courses through various MOOCs platforms

Research and Development:

Research and development is a main component in HEI to offer viable and cost effective solutions to the societal and industrial problems. Students and staff are encouraged to pursue research and prototype development by providing necessary infrastructure support. This imbibes investigation and design abilities among staff and students. This can be achieved by encouraging students to undertake major and minor projects.

Social Consciousness:

The institute encourages faculty and students to participate in various extension activities. This will create a sense of social responsibility, environmental consciousness and sustainability in the minds of students. The institute has an NSS Unit and Leo club through which all these activities are conducted.

Communication Skills and Team work:

There is a growing demand for language proficiency which is a main factor for employability in various sectors and to pursue higher studies. In this regard, courses on English communication skills and

Employability skills are included in the curriculum. As most of the students are from rural and vernacular background, to provide them a competitive advantage, communication skills training is offered through Campus Communication Skills Centre. The Campus Communication Centre provides a suitable platform for the students to prove themselves by participating in the language tasks and competitions with higher levels of motivation and with its gaming element within and beyond college hours. Students are encouraged towards peer learning to inculcate the spirit of team work. Through academic excellence, research and development, social consciousness and leadership, the institute aims to create lifelong learning ability among students.

20.Distance education/online education:

The institute participated extensively in MOOC's through NPTEL courses since 2017. students and faculty are encouraged to complete various certification courses offered by SWAYAM, Coursera. students are offered flexibility to complete two elective courses through NPTEL. The institute is recognised as a valuable local chapter with a rating of A and AA based on performance in online certifications during the years 2018 and 2019 respectively.

The institute is also recognised as a remote centre for IIT Bombay Spoken Tutorial project funded by the National Mission on Education through Information and Communication Technology (ICT). Students and staff are extensively trained in various courses through spoken tutorial.

During the COVID-19 pandemic period, the institute adopted online education and implemented successfully.

Extended Profile

1.Programme

1.1 18

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.Student

2.1 4892

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	View File

2.2 1282

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.3 4867

Number of students who appeared for the examinations conducted by the institution during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.Academic

3.1 1087

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.2 256

Number of full-time teachers during the year:

Extended Profile

1. Programme

1.1 **18**

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2. Student

2.1 **4892**

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	View File

2.2 **1282**

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.3 **4867**

Number of students who appeared for the examinations conducted by the institution during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3. Academic

3.1 **1087**

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.2	256
Number of full-time teachers during the year:	
File Description	Documents
Institutional Data in Prescribed Format	View File
3.3	260
Number of sanctioned posts for the year:	
4.Institution	
4.1	506
Number of seats earmarked for reserved categories as per GOI/State Government during the year:	
4.2	97
Total number of Classrooms and Seminar halls	
4.3	1230
Total number of computers on campus for academic purposes	
4.4	1893.80
Total expenditure, excluding salary, during the year (INR in Lakhs):	

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

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

The academic programmes of the institute are designed in accordance with the vision and mission of the institute and the departments. The curriculum is developed in such a way that students demonstrate essential technical knowledge, skills and abilities needed for professional practice in order to contribute

their best to the building of Nation.

Local, Regional, National and Global developmental needs

The Courses like Industrial waste and waste water engineering, Utilization of electrical energy, Renewable energy sources, Energy Audit, conservation and management, Basic Crop Production Practices, etc., facilitate the students to visit, analyse and provide solution to the real time problem based on the knowledge gained during their graduation programme.

The Curriculum is framed focussing on various thrust areas like Artificial Intelligence, Internet of Things, Machine Learning, Cyber Security and so on. These courses are provided to the students of all programmes to involve in Kakinada Smart City Projects and in the various societal factors that affects the development of the city.

The Curriculum consists of Courses like Engineering Exploration Project, Industry Oriented Minor Project and Socially relevant Project which provides the opportunity to the students to identify, analyse and find solutions for the existing problems in the society.

File Description	Documents
Upload additional information, if any	No File Uploaded
Link for additional information	https://aec.edu.in/NAAC/criterias/1/1.1.1%20All%20Programmes%20link.pdf

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

18

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	No File Uploaded
Details of syllabus revision during the year	View File
Any additional information	No File Uploaded

1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year**1061**

File Description	Documents
Curriculum / Syllabus of such courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	No File Uploaded
MoUs with relevant organizations for these courses, if any	No File Uploaded
Any additional information	No File Uploaded

1.2 - Academic Flexibility**1.2.1 - Number of new courses introduced across all programmes offered during the year****153**

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	No File Uploaded
Any additional information	No File Uploaded
Institutional data in prescribed format (Data Template)	View File

1.2.2 - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System**18**

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	No File Uploaded
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	View File

1.3 - Curriculum Enrichment

1.3.1 - Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum

In accordance with the AICTE model curriculum, APSCHE guidelines, the Institute has designed the curriculum by integrating cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability. Apart from this, students are encouraged to participate actively in various co-curricular activities related to human values, environment and sustainability issues and gender equity.

Professional Ethics and Human Values

The institute emphasizes value education through several unique courses like Professional Ethics and Human Values, Personality Development through Life Enlightenment skills, Intellectual property rights and Patents, Stress management by Yoga to inculcate the workplace etiquette and ethics in professional life and to balance social and professional life.

Gender

The institute is conscious of providing equal opportunities for men and women and prepares women to assume leadership roles in all walks of life through co-curricular activities.

Environment and Sustainability

To nurture the students about the physical, chemical, and biological characteristics of the surroundings in which they live, the Curriculum is designed with courses like Environmental Science, Environmental Impact assessment and Management, Environmental pollution and control, Air pollution Engineering, Disaster Management, Industrial waste and waste water engineering, Environmental remediation, and contaminated sites etc.,

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	View File
Any additional information	No File Uploaded

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year**20**

File Description	Documents
List of value-added courses	View File
Brochure or any other document relating to value-added courses	No File Uploaded
Any additional information	No File Uploaded

1.3.3 - Number of students enrolled in the courses under 1.3.2 above**3289**

File Description	Documents
List of students enrolled	View File
Any additional information	No File Uploaded

1.3.4 - Number of students undertaking field work/projects/ internships / student projects**2984**

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	View File
Any additional information	No File Uploaded

1.4 - Feedback System

1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni

A. All 4 of the above

File Description	Documents
Provide the URL for stakeholders' feedback report	https://www.aec.edu.in/?p=StakeholderFeedback
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	No File Uploaded
Any additional information	No File Uploaded

1.4.2 - The feedback system of the Institution comprises the following

A. Feedback collected, analysed and action taken made available on the website

File Description	Documents
Provide URL for stakeholders' feedback report	https://www.aec.edu.in/?p=StakeholderFeedback
Any additional information	No File Uploaded

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment of Students

2.1.1.1 - Number of students admitted (year-wise) during the year

1296

File Description	Documents
Any additional information	View File
Institutional data in prescribed format	View File

2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)

467

File Description	Documents
Any additional information	View File
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

In keeping with the Outcome-based Education (OBE) philosophy, the institution promotes a student-centred approach. Each student is given personal attention during their course of study. The institute follows a systematic approach to uplifting slow learners and developing advanced learners' skills.

The Head of the Department (HoD) appoints one faculty member who handles the course for that section as a class teacher for each section/class to identify the slow and advanced learners. Proctors supervise each student's performance and keep track of each student's academic and personal well-being.

Slow Learners:

The students who secured less than 50% in the first sessional examination are identified as slow learners. Makeup Classes are conducted for the slow learners to help them improve their performance in second sessional examinations.

Advanced Learners:

The students who secured more than 50% in the first sessional examination are considered advanced learners. Advanced learners were encouraged by the respective proctor to take up creative projects for competing in various contests. Students are also motivated to attend seminars, workshops, and events hosted by other institutes. Students are encouraged to acquire new age skills through MOOCs. Students are motivated to pursue higher studies and prepare for competitive examinations.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://aec.edu.in/NAAC/criterias/2/2.2%20-%20proof.pdf

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
31/05/2021	4892	256

File Description	Documents
Upload any additional information	View File

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:

The Institute, being autonomous, provides a student-centric learning environment through Outcome-Based Education (OBE). The curriculum has been designed to offer different student-centric learning experiences such as experiential, participative, and problem-solving methods.

EXPERIENTIAL LEARNING

Experiential learning is a method of active learning in which students "learn by doing" and reflect on their experiences. Students are encouraged to take up internships, industrial /field visits, and participate in skill development programmes.

PARTICIPATIVE LEARNING

Participatory learning is a collection of pedagogical practices and approaches that encourage students to participate in the learning process. The institution has offered several ICT Tools/Resources to build a learner-centric learning environment. Students are trained regularly in new trends and innovative technology through workshops/seminars delivered by experts from industry and academia. Soft skills classes are conducted to improve the student's communication skills by encouraging them to

participate in group discussions/tasks, JAM sessions and debates etc., from the first year onwards.

PROBLEM-SOLVING LEARNING

Problem-solving learning is a student-centred method in which students learn about a subject by working in groups to solve an open-ended problem. A team of students participate together to provide a solution to societal and industrial problems.

File Description	Documents
Upload any additional information	View File
Link for additional Information	https://aec.edu.in/NAAC/criterias/2/AQAR%20Upload%20-%20final%20all%20dept.pdf

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

The institution supports the extensive use of ICT tools and online resources for effective teaching and learning process. In this regard, all classrooms, seminar halls and labs are provided with ICT facilities such as LCD projectors and PCs with internet access to help students learn concepts more readily by visualising the technology or idea. In addition, each department includes smart classrooms with interactive displays. Flipped classroom concept was implemented through licenced Microsoft Teams to improve the teaching and learning process. The lecture notes and PowerPoint presentations are uploaded in MS Teams to provide easy access to the e-resources.

All faculty members efficiently implement the teaching-learning process by utilising the available ICT-enabled resources. A significant proportion of faculty members use learning materials created by them and the demonstrations available in SWAYAM, NPTEL, YouTube, and Coursera. A media center is established to record video lectures and develop e-content instructional materials. The Central Library of the institute is additionally equipped with ICT tools. A digital library allows remote access to e-resources, e-journal articles, and e-books. An OPAC is available to search the catalogue of library materials.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://aec.edu.in/NAAC/criterias/4/4.1.1%20Additional%20Information.pdf
Upload any additional information	View File

2.3.3 - Ratio of students to mentor for academic and other related issues

2.3.3.1 - Number of mentors

255

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	View File
Circulars with regard to assigning mentors to mentees	View File

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

Academic Calendar:

The Principal and Dean-Academics prepare an academic calendar at the beginning of each academic year that includes 16 weeks of the schedule for teaching and examination. It is made available to faculty and students one month before the commencement of classes. The academic calendar is posted on all department notice boards and is available on the college website <https://aec.edu.in/?p=Academic-Calenders1>.

Each department develops a plan, i.e., an Event calendar based on the academic calendar to accommodate co-curricular and extra-curricular events. The institution strictly follows the academic calendar, except in the case of unforeseen situations that do not disturb the overall deadlines. The principal is authorized to change the academic calendar under unavoidable circumstances.

Teaching Plans:

The respective HoDs prepare the course allotment for each semester and transmit it to the faculty. Teaching hours are assigned to

each course based on the number of credits. The faculty develops a 'Lesson Plan,' which specifies the number of hours needed to finish each unit. At the start of each semester, approved lesson plans and handouts are distributed to students. The syllabus and lesson plans are appended to the attendance registers, and the topics delivered are recorded as a "Diary of Lectures".

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	View File

2.4 - Teacher Profile and Quality

2.4.1 - Number of full-time teachers against sanctioned posts during the year

256

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	View File
List of the faculty members authenticated by the Head of HEI	View File
Any additional information	No File Uploaded

2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

65

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	View File
Any additional information	View File

2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

1899

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	View File
Any additional information	View File

2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

19.9

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	View File
Any additional information	View File

2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

81

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	View File
Upload any additional information	View File

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

The institution's examination reforms keep its examination system open to revisions to strengthen it from time to time, making the system foolproof. The following essential enhancements to the Examination Management System (EMS) have been made. Exam schedules are prepared by following the academic calendar of the institution. Continuous assessment includes Sessional Examinations, consisting of descriptive, objective and assignment. Students' marks are entered into Bee's Examination Tool (BET) and

are viewable to both students and parents.

All examination tasks have been connected with the Examination Management System using BET. The college has used electronic processes in publishing examination schedules on the college website, preparing a database of eligible candidates, collecting exam fees, viewing timetables, preparation of hall tickets, conducting examinations on pre-printed bar-coded and OMR answer booklets, and post-exam tasks such as declaring results, paying revaluation/script viewing fees, and issuing grade cards. The question paper for the Semester End Examinations (SEE) is also set by an external course expert from a prestigious institution. The observer team comprises internal academics responsible for taking corrective measures against any malpractices that occur. In addition, scribes are assigned to Physically Challenged students in accordance with the regulations.

File Description	Documents
Upload any additional information	View File
Paste link for additional Information	https://aec.edu.in/NAAC/criterias/2/Reforms.pdf

2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

In 2016, the Institute adopted Outcome Based Education (OBE) to provide education through a student-centred approach and an outcome-oriented teaching and learning process. For all UG and PG programmes, Program Educational Objective (PEOs), Programme Outcomes (POs), and Programme Specific Outcomes (PSOs) are prepared. Course Outcomes (COs) are prepared for each course in the programme. The curriculum is prepared in line with POs & PSOs, including courses in basic sciences, humanities and social sciences, Engineering and Technology, professional and open electives, projects, and seminars.

All UG and PG Program Outcomes (POs), Program Educational Objectives (PEO) and Program Specific Outcomes (PSOs) have been presented to stakeholders as follows:

Vision, Mission, POs, PEOs and PSOs

Institute Website, Syllabus book, Attendance Register & Lab Records, Department Corridors

COs

Institute Website and Syllabus book

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	View File
Upload any additional information	No File Uploaded
Link for additional Information	https://aec.edu.in/?p=Outcomebased%20Education

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

In the process of attainment of Course Outcomes (CO), Program Outcomes (PO) and Program Specific Outcomes (PSO), initially, CO-PO-PSO mapping was completed in a matrix format. The intensity of mapping is designated by numerical 0, 1, 2, and 3 depending on the correlation of Course Outcome with concerned PO or PSO. In the calculation process, initially, CO Attainment is calculated by giving weightage to Direct Assessment and Indirect Assessment. All assessments conducted directly by the Instructor contributed to Direct Assessment. The evaluations of the Perception of Learners' satisfaction with attaining the Skills mentioned in the COs contribute to Indirect Assessment (Surveys).

During the Content delivery period, as a part of Continuous Evaluation, different assessment methods are designed in the Course curriculum. They are Sessional Examinations, Quiz, Assignment, etc.,. Semester End Examinations (SEE) are conducted at the end of the content delivery period. All these assessments contribute to Direct Assessment. Weightages for direct and indirect assessments are 90% and 10%, respectively. For a particular Course, Attainment is calculated as 90% of Direct Attainment and 10% of Indirect Assessment. In the Direct Assessment, SEE, Descriptive Examination, Objective Examination and Assignment are given weightage as 60%, 24%, 10% and 6%,

respectively.

File Description	Documents
Upload any additional information	View File
Paste link for additional Information	https://aec.edu.in/NAAC/criterias/2/attainment%202020-21.pdf

2.6.3 - Pass Percentage of students

2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

1282

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	View File
Upload any additional information	View File
Paste link for the annual report	https://aec.edu.in/NAAC/criterias/2/Annual%20Report%20of%20Autonomous%20Examination.%20final.pdf

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

<https://aec.edu.in/NAAC/criterias/2/SSS%20-%202020-21.pdf>

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

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

The institute has research facilities to carry out scientific research. The research facilities are updated frequently, and a well-defined policy is in place to promote research. The institute has constituted Research Committee which oversees all activities related to research facilities and promotion.

Research Promotion:

Research culture is promoted in the institution through

- Mentoring by senior scientists and academicians from higher learning institutions to undertake research projects.
- Training on various technologies/software to leverage the skills of the faculty.
- Conducting workshops on Research methodologies and IPR.
- Incentives for journal publications, conferences, publishing books and patents.
- Providing technical and financial support for patenting an idea.
- Providing academic leaves for research work
- Continuous augmentation of labs with latest equipment and softwares.
- Providing seed money to faculty and students to initiate their research.

Research Facilities:

The institute has well equipped laboratories enabling the faculty and students to carry out research. Further, the institute has research centers granted by JNTU Kakinada for the departments of EEE, ME and CSE.

Further, to provide quality research article access for faculty and students the institute has subscribed to Scopus database. For dissemination of research findings properly to the public domain, researchers are provided with an anti-plagiarism software iThenticate.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View File
Provide URL of policy document on promotion of research uploaded on the website	https://www.aec.edu.in/autonomous%20pdf/Policy/Research%20and%20Development%20Policy.pdf
Any additional information	No File Uploaded

3.1.2 - The institution provides seed money to its teachers for research

3.1.2.1 - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

10.159

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	View File
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View File
List of teachers receiving grant and details of grant received	View File
Any additional information	No File Uploaded

3.1.3 - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

0

File Description	Documents
e-copies of the award letters of the teachers	No File Uploaded
List of teachers and details of their international fellowship(s)	No File Uploaded
Any additional information	No File Uploaded

3.2 - Resource Mobilization for Research	
3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)	
1.24	
File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	View File
List of projects and grant details	View File
Any additional information	No File Uploaded
3.2.2 - Number of teachers having research projects during the year	
1	
File Description	Documents
Upload any additional information	View File
Paste link for additional Information	https://aec.edu.in/NAAC/criterias/3/15566_232_532_removed.pdf
List of research projects during the year	View File
3.2.3 - Number of teachers recognised as research guides	
21	
File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	No File Uploaded
Institutional data in Prescribed format	View File
3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year	
1	

File Description	Documents
Supporting document from Funding Agencies	View File
Paste link to funding agencies' website	Nil
Any additional information	View File

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

The Institution creates an environment that is suitable to the promotion of innovation, incubation and community orientation. A dedicated incubation center is available in the institute. Faculty and students have access to a variety of resources and guidance. Students are encouraged to use the technology to fulfil the needs of the community.

The major functions of the incubation center are:

- Providing necessary assistance for documentation, publication of research papers, and patenting.
- Providing financial assistance for major and minor research projects.
- Identifying the best project models and encourage the students with cash awards.
- Providing training through workshops, seminars and guest lectures on entrepreneurship.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

10

File Description	Documents
Report of the events	View File
List of workshops/seminars conducted during the year	View File
Any additional information	No File Uploaded

3.4 - Research Publications and Awards

3.4.1 - The Institution ensures implementation of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check through authenticated software

A. All of the above

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	View File
Any additional information	No File Uploaded

3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

3.4.2.1 - Number of PhD students registered during the year

6

File Description	Documents
URL to the research page on HEI website	Nil
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	View File
Any additional information	No File Uploaded

3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year

0.679

File Description	Documents
List of research papers by title, author, department, and year of publication	View File
Any additional information	No File Uploaded

3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

0.285

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.aec.edu.in/?p=Publications

3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

3.4.5.1 - Total number of Citations in Scopus during the year

265

File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	View File

3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

3.4.6.1 - h-index of Scopus during the year

07

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View File
Any additional information	No File Uploaded

3.5 - Consultancy	
3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)	
34.03448	
File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View File
List of consultants and revenue generated by them	View File
Any additional information	No File Uploaded
3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year	
2,40,000	
File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	View File
List of training programmes, teachers and staff trained for undertaking consultancy	View File
List of facilities and staff available for undertaking consultancy	View File
Any additional information	No File Uploaded
3.6 - Extension Activities	
3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year	
<p>The institute organized several extension activities to sensitize the students towards community needs. The students actively participate in social service activities leading to their overall development. There are two National Service Scheme (NSS) units, Red Cross Unit and LEO club in the institute.</p>	

NSS organized a residential seven-day camp in nearby villages and several activities were carried out by NSS volunteers addressing the social issues which include cleanliness, tree plantation, Environmental consciousness, AIDS awareness, Blood donation camp, Health check-up camp. In addition to these, NSS organised some events in the campus like international women's day celebrations, female inspirational awards programme to promote women empowerment. Also, Red Cross unit organized several campaigns such as cycle rally on completion of 100 years to Red Cross unit, mega blood donation camp, distribution of butter milk and masks to the policemen during covid 19. The institution distributed the food and groceries to the private teachers during pandemic and arranged the food packets to the poor during lockdown through Leo club unit. Overall, a total of 2433 students participated in the various programmes through these three units.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

6

File Description	Documents
Number of awards for extension activities in during the year	View File
e-copy of the award letters	No File Uploaded
Any additional information	No File Uploaded

3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

20

File Description	Documents
Reports of the events organized	View File
Any additional information	No File Uploaded

3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

1872

File Description	Documents
Reports of the events	View File
Any additional information	No File Uploaded

3.7 - Collaboration**3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work**

447

File Description	Documents
Copies of documents highlighting collaboration	View File
Any additional information	View File

3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

27

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	View File
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	View File
Any additional information	No File Uploaded

INFRASTRUCTURE AND LEARNING RESOURCES**4.1 - Physical Facilities**

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning, viz., classrooms, laboratories, computing equipments, etc.

The institute constantly interacts with various stake holders to discuss about the changing trends and requirements for creation and enhancement of the infrastructure facilities. The institute plans well in advance the requirement of infrastructural needs to meet the increase in intake and introduction of new courses besides improving the existing facilities to meet the cutting-edge trends and requirements of industry. Along with optimal utilization of existing resources, additional time slots and facilities are provided as and when it demands. Campus maintenance and assessment of future requirements in association with academic and administrative authorities is monitored by the principal. Apart from the adequate availability of physical infrastructure, the institute has plans for future expansion for additional requirements to promote a good teaching-learning environment.

Facilities for Teaching Learning

- 90 classrooms and 7 Seminar halls with ICT facility
- 54 laboratories across all departments
- Central Library
- E- content Development Facilities
- Computing facilities
- Internet through LAN and Wi-Fi facility across the campus including hostels with 450 access points for Wi-Fi connectivity
- Office 365 (Microsoft Teams) for online teaching
- Licensed Software and open-source software are available
- Dedicated Research Laboratories
- Workshops
- Skill Development Centres supported by APSSDC, SIEMENS, DASSAULT, ARC, CISCO Project labs

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

4.1.2 - The institution has adequate facilities for cultural activities, yoga, sports and games (indoor and outdoor) including gymnasium, yoga centre, auditorium etc.)

Physical Education is an integral part of the institute that

enhances physical fitness besides promoting sportsmanship and teamwork. Sports facilities are used to the maximum extent by students for their regular practices as well as for the annual sports events such as Central Zone Meet. In addition, the state-of-the-art fitness gymnasium with 75 fitness equipment and machines are available to the students, faculty and staff. In the institute various cultural events are organized for the young minds to exhibit and develop their inherent talents. The institution gives importance to cultural activities like singing, dancing, skits, and playing musical instruments for the extra-curricular development of student. The institute encourages the students to perform cultural activities during various occasions such as Fresher's Day and Farewell etc. Different clubs like NSS, Red Cross and LEO has been established in the college which organizes various cultural events on days of national importance and cultural festivals. Also, yoga and meditation are practiced by the students and staff for the best physical and mental fitness.

File Description	Documents
Geotagged pictures	View File
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

97

File Description	Documents
Upload any additional information	No File Uploaded
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)

585.37

File Description	Documents
Upload audited utilization statements	No File Uploaded
Details of Expenditure, excluding salary, during the years	View File
Any additional information	No File Uploaded

4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS)

The Central library is situated at a place which is easily accessible for all the students and staff. It has adequate number of terminals to facilitate searching/accessing e-resources, web browsing and other academic work. The library also has the facility for downloading/printing of materials from other resources. The library is equipped with modern technology and is upgraded as and when new technology emerges. The library is automated with a Software E-CAP. A Library Management System (LMS) is an enterprise resource planning system for libraries that is used to track items owned, issued and returned. This system enables efficient library administration to cater user services.

ECAP (Engineering College Automation Package), is a highly integrated, user-friendly, and compatible library automation system for complete computerization of all the in-house operations of any size or type of library. ECAP is intuitive, efficient, and compliant. The library software is user-friendly, and easy-to-use. It offers 24x7 access to the library resources and provides functions like acquisition, cataloguing, serial control, etc. Highly secure and efficient library database management provides greater efficiency of work processes and saves time of the librarian.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

4.2.2 - Institution has access to the following:

A. Any 4 or more of the above

**e-journals e-ShodhSindhu Shodhganga
Membership e-books Databases Remote
access to e-resources**

File Description	Documents
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership	View File
Upload any additional information	No File Uploaded

4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

42.61581

File Description	Documents
Audited statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

4.2.4.1 - Number of teachers and students using the library per day during the year

1290

File Description	Documents
Upload details of library usage by teachers and students	View File
Any additional information	No File Uploaded

4.3 - IT Infrastructure

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

Yes. The institute has created a policy which covers procurement and augmentation of required IT infrastructure, utilization of computer facilities including hardware, software, information resources, intranet and internet access facilities, strategies and

responsibilities for protecting the availability, confidentiality, and integrity of information.

The institute has allotted a budget of Rs 1 crore for updating its IT facilities.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
4892	1230

File Description	Documents
Upload any additional information	View File

4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus

A. 50 Mbps

File Description	Documents
Details of bandwidth available in the Institution	View File
Upload any additional information	No File Uploaded

4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing

A. All four of the above

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil
List of facilities for e-content development (Data Template)	View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

464.49

File Description	Documents
Audited statements of accounts	No File Uploaded
Upload any additional information	No File Uploaded

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities – classrooms, laboratory, library, sports complex, computers, etc.

The institution has appointed staff to maintain facilities such as buildings, Transport, electricity, housekeeping, garden etc. Regular cleaning of college floors, classrooms, laboratories, equipment, and rest rooms are being done by the housekeeping team under the supervision of a floor in-charge. Stock verification and maintenance of the equipment in all laboratories and other facilities is done at the end of every year by Lab In-charge and the report is submitted to the principal through the HOD concerned.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.aec.edu.in/NAAC/criterias/4/4.4.2%20AQAR%2025-07-2022.pdf

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year

2762

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	View File
Upload any additional information	View File

5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

1907

File Description	Documents
Upload any additional information	View File
Institutional data in prescribed format	View File

5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology

A. All of the above

File Description	Documents
Link to Institutional website	https://aec.edu.in/NAAC/criterias/5/5.1.3(2020-21)Proofs.pdf
Details of capability development and schemes	View File
Any additional information	View File

5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

3083

File Description	Documents
Any additional information	View File
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	No File Uploaded
Upload any additional information	No File Uploaded

5.2 - Student Progression

5.2.1 - Number of outgoing students who got placement during the year

861

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File

5.2.2 - Number of outgoing students progressing to higher education	
45	
File Description	Documents
Upload supporting data for students/alumni	No File Uploaded
Details of students who went for higher education	View File
Any additional information	View File
5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year	
5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year	
51	
File Description	Documents
Upload supporting data for students/alumni	View File
Any additional information	View File
5.3 - Student Participation and Activities	
5.3.1 - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year	
0	
File Description	Documents
e-copies of award letters and certificates	No File Uploaded
Any additional information	No File Uploaded
5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution	
<p>The Aditya Engineering College Student Council is a nominated body that serves as a representation of the student body. The Student Council's primary function is to perform the duties of a legislative body by formulating policies and making decisions that</p>	

are in the best interest of the student body as a whole. It will act as a conduit through which the student body can convey their thoughts, feelings, and concerns to the administration. The goal of the Student Council is to maintain an active search for problems that are related to students and contribute to the resolution of those problems, thereby fostering a healthy environment within the institute.

Functions of the Student Council:

The Student Council is responsible for:

- i. Act as the primary venue for the airing of student viewpoints and concerns.
- ii. Maintain consistent communication with the faculty, students, and administration, and serve in this capacity when necessary.
- iii. Advise and oversee the activities of the many subcommittees that fall under the purview of the Student Council. On the other hand, it is forbidden for it to interfere in the day-to-day governance of the clubs and committees.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

5.3.3 - Number of sports and cultural events / competitions organised by the institution

2

File Description	Documents
Report of the event	View File
List of sports and cultural events / competitions organised per year	View File
Upload any additional information	No File Uploaded

5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly

to the development of the institution through financial and other support services

The institute believes that an active alumni association can significantly contribute to academic matters and student support. In this connection, alumni are encouraged to be a part of various statutory committees of the institute. The institute encourages student-alumni interactions that would benefit the students in advanced learning from rich expertise of the alumni.

The institute has a registered and functional Alumni Association. It is proactive, supportive, and works for the development of the students and the institute. It has a governing body with President, Vice-president, Secretary, Treasurer and General Secretary. Two alumni chapters are formed at Hyderabad and Bangalore which actively contribute to outreach activities.

The alumni involve actively in the following activities:

- Curriculum development and revision
- Deliver Guest lectures on emerging technologies
- Career guidance to enlighten the students on different career options
- Provide industry-institute interaction
- Support for placements and internships
- Entrepreneurship guidance

File Description	Documents
Upload any additional information	View File
Paste link for additional Information	Nil

5.4.2 - Alumni's financial contribution during the year

E. <2 Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

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

YES

The institute focuses on effective governance through decentralization to achieve its vision and mission. To achieve these goals, the Governing Body (GB) oversees the institute's operations and provides directions to various statutory and non-statutory bodies of the institute. The governing body ensures that all decisions on the matters such as admissions, new programmes, infrastructure, teaching and learning process and placements are in-line to realize the vision of the institute. The governing body takes a democratic, decentralised, and transparent approach to governance. The Governing Body meets on a regular basis to examine the institute's overall growth and provide recommendations for further improvements while keeping the institute's vision and mission in view.

It encourages all stakeholders to participate in the institute's administrative activities by forming several academic and administrative committees. This provides adequate freedom to faculty for strengthening teaching-learning process, academic advancement and holistic development of the students. The faculty are actively involved in designing new experimental set up in laboratories and executing in-house & funded R & D projects. Faculty members are encouraged to be innovative and critical towards the administrative mechanism thus making them participate in the continuous development of the institute to achieve the vision and mission.

File Description	Documents
Upload any additional information	View File
Paste link for additional Information	https://www.aec.edu.in/?p=Committees

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

The Institute practices decentralization and participative management in frequent consultation with the Board of Governors (BOG). The BOG is responsible for the overall administration of the institution. The BOG conducts regular meetings to supervise

all functional bodies to achieve its mission and vision. Academic Council (AC) is the highest authorising body for all academic outcomes, and this council is in charge of making all departmental decisions. This unit is also responsible for scrutinization and approval of all academic proposals provided by the Board of Studies (BOS) from different departments. It also recommends new academic programmes and other academic matters to the BOG, if required. This unit also acts as a mentor for improving extracurricular activities in different departments. Before implementing any important measures, the principal discusses it with all the Deans, Committees, and HODs during meetings and make decisions with respect to the outcomes of the discussions. The institution is well known for its good administrative practices, academic activities, infrastructure maintenance, and work culture. All convenors of various committees, Deans and HODs have a lot of freedom and are empowered with decision making to plan their own activities.

File Description	Documents
Upload strategic plan and deployment documents on the website	View File
Upload any additional information	View File
Paste link for additional Information	Nil

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

The institute prepares the strategic plan in consultation with various stakeholders periodically as per the requirement for the holistic development. Placement is a significant parameter for all the stake holders. Hence, a strategic plan has been devised and is successfully implemented to improve the placements.

To improve placements, the institute has designed the curriculum to incorporate employability skills from second-year to third-year. This enables the students to focus on aptitude, reasoning and soft skills to become employable.

In addition to this, the institute has a technical training centre (Technical hub) which mainly focuses on technical training and certifications on various technologies like Azure DevOps, AWS,

Machine Learning, Data science, Cloud Computing, IoT, Ethical Hacking and Block chain. Skill tests are conducted regularly to assess the student's performance. Students are encouraged to participate in various coding competitions to give them edge to work with companies like Amazon, Google, Microsoft etc.

The institute focused on the skill development of the students in order to make them industry ready. In this regard, various skill development training programmes are offered through MOUs with APSSDC, CISCO Networking Academy, Tessolve, Red Hat Academy, Automation Anywhere, Salesforce, Certiport, Oracle academy, AWS Educate and VmWare IT Academy.

File Description	Documents
Strategic Plan and deployment documents on the website	View File
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

6.2.2 - The functioning of the various institutional bodies is effective and efficient as visible from the policies, administrative set-up, appointment and service rules, procedures, etc.

The institution has a decentralized and transparent mechanism in management, administration, financial and academic affairs. The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules. This mechanism is delegating appropriate responsibilities from the top-level management to bottom level and allows the top management to focus on policy making and major decisions. The constitution of statutory committees like Governing Body, Academic Council, Finance Committee, Board of Studies are systematically carried out with specified functions and responsibilities as per the requirements of the regulatory/statutory bodies. These committees play a major role in policy making of governance, academics, finance, research and teaching-learning.

The principal ensures the smooth functioning of the institution with the support of Deans, Head of the Departments, chief librarian, chief accounts officer, administrative officer and various committees. There are non-statutory committees working

hand-in-hand in identifying possibilities, planning, organizing, implementing and monitoring all the activities of the institution. The committees include Anti Ragging / Discipline Committee, Gender Equity & Grievance Redressal Committee, web-site committee, library committee, ICT/LMS/ILMS/e-resources Committee etc.

File Description	Documents
Paste link to Organogram on the institution webpage	https://www.aec.edu.in/docs/AEC%20C9%20(2).pdf
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.aec.edu.in/docs/AEC%20C9%20(2).pdf

6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Documen	View File
Screen shots of user interfaces	View File
Details of implementation of e-governance in areas of operation	View File
Any additional information	No File Uploaded

6.3 - Faculty Empowerment Strategies

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

Welfare measures for career development/ progression

1. Providing incentives to the faculty members for publishing Journal papers, Conferences, textbooks, book chapters and filing the patents
2. Providing seed money to innovative projects
3. Providing financial assistance to faculty members to participate in FDPs, Workshops, Seminars and conferences
4. Providing financial assistance for professional body

memberships to faculty members

5. Providing one month of paid leave for Ph.D. thesis submission
6. Providing paid leave to faculty to attend conferences

Additional benefits for both teaching and non-teaching staff

1. Free college bus facility is provided to staff members
2. Free Hostel facility is available within the campus for staff members
3. Subsidized college bus facility to the children of staff
4. Subsidized rent for staff quarters
5. Tuition fee concession for the children of Staff
6. Sponsored health insurance for teaching staff
7. ESI facility for the welfare of administrative staff
8. Central dispensary is established in the campus with a qualified doctor and an ambulance is available round the clock
9. Providing salary advance to staff members in case of medical emergencies
10. Maternity leave is provided to the women employee for a period of three months
11. Organizing exclusive health camps for free treatment to the staff
12. Providing uniforms to non-teaching faculty

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

6.3.2 - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

193

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

63

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	View File
Upload any additional information	No File Uploaded

6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

198

File Description	Documents
Summary of the IQAC report	View File
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View File
Upload any additional information	No File Uploaded

6.4 - Financial Management and Resource Mobilization**6.4.1 - Institution conducts internal and external financial audits regularly**

The institute's accounts department is the one in charge of doing the organization's internal financial audit. A chartered accountant with relevant experience is in charge of carrying out the external financial audit.

Auditing procedures are in place at the Institute to verify that financial regulations are followed. Both the internal and external audits are carried out on a yearly basis, however the internal audits are carried out periodically. The management team looks over the reports that the external and internal auditors have produced and then passes them on to the appropriate internal auditors.

The financial audit is an ongoing process, and the accounting

department of the institute performs a careful check of all payments, receipts & vouchers of the transactions, cash books, and ledger account reviews that are performed on an accrual basis during each fiscal year. At the conclusion of each fiscal year, the financial records are subjected to an audit by experienced chartered accountants, and the income and expenditures, balance sheet, and written notes to accounts are all certified.

By publishing them on the website that the institution maintains specifically for statutory and regulatory agencies, audited financial statements are made available to the general public.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	No File Uploaded
Any additional information	No File Uploaded

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

The organization has a clearly defined financial policy that ensures funds are used effectively for educational, managerial, and development activities which support the vision and mission of the institute.

Mobilization of funds:

1. The major source of income to the institute is the tuition fee collected from students. The fee is fixed by the government of Andhra Pradesh based on the recommendations of AP fee regulating authority.

2. Funds received from organizations such as UGC, AICTE, DST, ISTE etc. are used to carry out research activities, organize seminars and conferences, modernization of labs and travel grants. The institute has a well-defined policy to carry out the consultancy works by the faculty.

Resource Utilization: Based on budget estimates obtained from all departments, annual budget is developed to ensure the best possible use of financial resources. Every year, the management analyzes financial activities by comparing estimated budgets with actual expenditures to interpret the effective utilization of funds.

The funds are used to cater the following needs:

- Salaries of Employees
- Infrastructure augmentation such as computers, electrical goods, furniture, lab equipment, sports material.
- Academic maintenance
- Physical maintenance
- Library books, journals, e-journals subscriptions, newspapers, periodicals

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

Use of ICT and collaborative teaching learning Process:

The institute's IQAC is involved in implementing a variety of innovative teaching learning approaches, including video lectures, orientation programmes, quality improvement of teaching through inter-disciplinary lectures, skill-oriented programmes, supportive classes, problematic-based learning, student-aided teaching, creative thinking, co-operative learning and students' seminars. The students are exposed to collaborative learning in which a

group of students work on problem solving. During the academic year, students participate in industrial outings to enhance their practical knowledge. Further, students receive career counselling from alumni. IQAC holds frequent review meetings with academic coordinators and departmental heads to ensure that all curriculum activities are in order.

Feedback system:

The feedback is gathered from industrial and academic experts during their visits to the institution, employers who come for recruitment, resource persons and alumni who come to share their knowledge with other stakeholders, students and industry. Faculty, parents and management also provide feedback. The institution compiles the responses gathered by IQAC for further analysis. The collected input is analysed and used to improve quality in curriculum development, infrastructure services, and research. This overall evaluation assists the institute in establishing itself as a premier institute.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

The IQAC is actively contributing towards improving academic environment, teaching and learning processes, curriculum development & evaluation methods and research activities in the institute. The institute has taken various measures to enhance quality in teaching and learning process by periodical review of course plans, course files, class work, feedback from students, remedial classes for slow learners, usage of ICT tools.

IQAC ensures that every department follows the event calendar to organize guest lectures, seminars, workshops, NPTEL / MOOCS courses & other e-resources, student technical chapters, tech-fests etc. The activities and development in departments are reflected in a format called Departmental Performance Index and are reviewed through internal audit by IQAC cell. This provides an opportunity to enhance the quality of teaching-learning process in the institution. After the completion of each semester, course

attainments and programme attainments are calculated and submitted to IQAC for review. IQAC ensures whether the set benchmarks are accomplished and initiates corrective measures, if required.

Annual academic audit

IQAC ensures continuous improvement in academics through internal academic audit by Academic & Administration Audit Committee (AAA) of the institute.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)

A. Any 4 or all of the above

File Description	Documents
Paste the web link of annual reports of the Institution	https://www.aec.edu.in/IQAC/Annual_Reports/ANNUAL%20REPORT(2020-21).pdf
Upload e-copies of accreditations and certification	View File
Upload details of quality assurance initiatives of the institution	View File
Upload any additional information	View File

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

The Institute always believes that women empowerment is the most important aspect in the development and well-being of the 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.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment

A. Any 4 or All of the above

File Description	Documents
Geotagged Photographs	View File
Any other relevant information	No File Uploaded

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

Solid waste management:

The institute strictly maintains the waste segregation rules laid by the government in solid waste management recently. All solid wastes from college and hostel are segregated at source and disposed properly. Green/Blue/yellow dustbins for biodegradable waste and red dustbins for non-biodegradable waste are placed in every floor of the campus, hostels and canteen. The biodegradable waste is recycled using the composting machine installed in the college campus. The non biodegradable wastes are handed over to suitable external vendors.

Liquid waste management:

The liquid waste raised from various sources is collected in the pond. The entire waste is treated in the pond and reused for watering the plants, lawn and all the other tree cover.

E-Waste Management/Waste Recycling System:

In this connection, a separate space is dedicated in the campus to dump E-Waste. The Institute is in process of Signing an MoU to manage the E-Waste effectively in the campus.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	View File
Geotagged photographs of the facilities	View File
Any other relevant information	No File Uploaded

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of the facilities	View File
Any other relevant information	No File Uploaded

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

1. Restricted entry of automobiles
2. Use of bicycles/ Battery-powered vehicles
3. Pedestrian-friendly pathways
4. Ban on use of plastic
5. Landscaping

A. Any 4 or All of the above

File Description	Documents
Geotagged photos / videos of the facilities	View File
Various policy documents / decisions circulated for implementation	View File
Any other relevant documents	No File Uploaded

7.1.6 - Quality audits on environment and energy undertaken by the institution

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:

1. Green audit
2. Energy audit
3. Environment audit
4. Clean and green campus recognitions/awards
5. Beyond the campus environmental promotional activities

A. Any 4 or all of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	View File
Certification by the auditing agency	View File
Certificates of the awards received	View File
Any other relevant information	No File Uploaded

7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of facilities	View File
Policy documents and brochures on the support to be provided	View File
Details of the software procured for providing assistance	View File
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

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 curated

to fit the co-curricular aspects but also focuses in 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 proud receiver and patron of several financial assists meant to help students with strained financial condition. 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	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View File

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

The Institute believes not only in laying strong academic foundation for the students but also in bringing up the culture of abiding to the constitutional obligations. As part of this, on 26th November of every year the Institute celebrates Samvidhan Divas (Constitution Day) to remember and remind the democratic rights. Vigilance awareness week is celebrated in the institute with oath-taking ceremony for reaffirmation of Right against Exploitation. The institute also celebrates International Anti-Corruption day on 9th December of every year. The institute also celebrates National Voters Day on 25th January with briefing the importance of voting and encourages young voters cast their vote without fail. The Institute also celebrates National Unity Day on 31st October of every year to spread the need of unity among the countrymen. The Institute organizes oath taking ceremonies, seminars and webinars every year on these days.

Courses on Professional Ethics and Human values, Constitution of India are made essential part of the curriculum for the students. Professional Ethics and Human Values course covers professional as

well as personal ethics and values that one needs to learn in order to become a responsible and proud citizen.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	View File
Any other relevant information	No File Uploaded

7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized

A. All of the above

File Description	Documents
Code of Ethics - policy document	View File
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	View File
Any other relevant information	No File Uploaded

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The institute celebrates/organizes national and international commemorative days, events and festivals. It is an inherent and great duty of an educational institution in civilizing their wards with regard to heritage, culture and history of the space they inhabit. Students of this institute are on a mission towards better India by breaking the boundaries of religion and caste.

Every year our institute organizes the national festivals and

birth / death anniversaries of the great Indian personalities. Staff and students get to know the importance of national integrity in the country in general and their role in it in particular.

1. Independence Day
2. Republic Day
3. International Women's Day
4. International Yoga Day
5. World Environment Day
6. NSS Foundation Day
7. World Nature Conservation Day
8. Ambedkar Jayanti
9. Gandhi Jayanti
10. Engineers Day
11. Teachers Day
12. National Science Day
13. International Day for Eradication of Poverty
14. National Unity Day
15. National Mathematics Day
16. National Librarians Day
17. Vanamahotsavam Week

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	View File
Geotagged photographs of some of the events	View File
Any other relevant information	No File Uploaded

7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

<https://aec.edu.in/?p=Best%20Practice#tab6>

File Description	Documents
Best practices in the Institutional website	https://aec.edu.in/?p=Best%20Practice#tab6
Any other relevant information	Nil

7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

The Institute constantly encourages the students to participate in various co-curricular programs. Consequently, our students got opportunity to participate in University Innovation Fellows Program of Stanford University, San Francisco, California, USA. In the years 2017 and 2019, eight of our students, who are from rural and semi urban background, are part of this program.

The selected fellows are empowered to become agents of change to ensure their peers gain the attitudes, skills and knowledge required to navigate a complex world. These student leaders create opportunities to help their peers build the creative confidence and entrepreneurial mindset needed to address global challenges and to build a better future. They serve as advocates for lasting institutional change with academic leaders, lending the much-needed student voice to the conversations about the future of higher education.

The teaching learning process, skill development, extension and entrepreneurship initiatives of the institute played a key role in achieving this distinction of positioning students from a rural/ semi urban set up at global level

File Description	Documents
Appropriate link in the institutional website	http://aec.edu.in/?p=Institute%20Distinctiveness#tab6
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

1. To strengthen teaching-learning process through development of e-content.
2. To improve the research competency by encouraging faculty to publish in Web of Science and Scopus indexed journals.
3. To get recognition for research centre in department of ECE and renewal of research centres of CSE, EEE and Mechanical by the affiliating university.
4. To orient faculty through capacity building with regard to NAAC, NBA and NIRF accreditations.