



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

S.A. ENGINEERING COLLEGE

POONAMALLEE-AVADI MAIN ROAD, VEERARAGAVAPURAM,
THIRUVERKADU POST,

600077

www.saec.ac.in

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

History

The S.A. Engineering College is named after Sakunthala Ammal Sponsored by Dharma Naidu Educational & Charitable Trust established in the year 1998-1999 in accordance with the general policy of the Govt. of TamilNadu to give high priority to Technical Education. The trust comprises a team of highly respected, recognized professionals in academics, management and industry, dedicated to creating an institution imparting quality technical education.

The S.A. Engineering college campus is spread over a vast area of about 25.58 acres The College is well-planned and well-designed, built with more than 4 lakh square feet of constructed area. The aesthetically designed campus has ultramodern facilities with separate academic wing for each department, administration block, laboratories and workshops, state-of-the-art computer labs, spacious classrooms, well-stocked library, conference hall, separate seminar halls for departments, canteen, playgrounds and hostel facilities.

Our Speciality

S.A.Engineering College offers the students with advantageous atmosphere with state-of-the-art facilities, distinguished mentors, and pleasant educational environment. The institution provides the employability and communication skills for the development of students. It provides quality education in an environment of discipline. The focus is on shaping students to become self-disciplined, self-dependent and self-confident individuals. SAEC pulls out all the stops to mould the students' career in such a way that they excel in all fine distinction of life. The College's stand is on mere acquisition of course knowledge, its application and also on all-round personality development of the student and his value system.

Our Standards

The College maintains high standards of education by providing a wide array of world-class academic facilities, employing highly qualified and experienced faculty members and creating an ambience conducive to quality education. The College offers the 6 Undergraduate courses in Engineering, 4 Post Graduate courses in Engineering, Master of Computer Applications (M.C.A) and Master of Business Administration (M.B.A). The annual intake is 1002 students in all courses.

In recognition of the quality system of high caliber being implemented for the administration of the institution and achievement of its goals, m/s. TUV NORD have recorded ISO 9001: 2015 certification. NAAC accredited with A grade and 5 UG Courses are accredited by NBA.

Vision

To transform our institution into quality technical education centre imparting updated technical knowledge with character building.

Mission

To create an excellent teaching and learning environment for our staff and students to realize their full potential thus enabling them to contribute positively to the community. To significantly enhance the self-confidence level for developing creative skills of staff and students.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

S.A Engineering College adopts Teacher centric and learner centric approach to meet the various strategic objectives to enhance learning skills of students. Learning is brought about through teaching process in which the students can aim at transmission of knowledge and imparting skills. We encourage contact between students and faculty through mentoring efficacy. We motivate active learning through remedial classes to aim at NSLB (No Student Left Behind).

The whole lot of SAEC faculty motivate and counsel the students for their betterment in all aspects of career guidance, academics, personal etc.

The research culture which encourages to take up more Research projects and to increase publications in journals having high impact factor is largely prevailing in our college.

We have re-oriented as Research based Teaching Institution under Anna University, Affiliating University.

Many industry connect programs are on-going to enhance the Industrial participation in most of our knowledge creation and knowledge dissemination activities.

The feedback systems are routed back as inputs as part of the cause-and-effect to enhance the areas to be focused. We involve all the stakeholders such as students, parents, employers and alumni in our feedback system. Our institution is been awarded with accreditation standard from the statutory body AICTE and as well implemented the ISO 9001:2015 standard by which the institution has a frame work of system.

Institutional Weakness

With the ever changing knowledge spiral, industry must contribute to recreate the entire curriculum in all the disciplines.

To enhance synergy between the various disciplines of engineering for developing Interdisciplinary R&D projects.

To identify the current status of the required Skill of students and to impart the necessary Training to increase it further.

To incorporate the new age evaluation mechanism to Assess the knowledge of students other than conventional methods.

Most of the weaknesses can be addressed after our institution attains full autonomous status in Administration, Teaching Learning and Research.

Institutional Opportunity

The college can take up more real strategic thinking to incorporate more radical and required reforms to

- Acquire knowledge in Multidisciplinary streams for both students and faculty
- Motivate faculty to publish papers in journals as a part of receiving research grants
- Create opportunities for students to become part of the project or work and learn the subject
- Facilitate faculty to explore new applications and to visit new industries
- Make the students and staff to understand their ambitions and aspirations

Institutional Challenge

The tactic for engineering education needs to be interdisciplinary with new technology courses at the core. Exponential advances in knowledge, instrumentation, communication, and computational capabilities have created mind-boggling possibilities, and students must be cutting across traditional disciplinary boundaries in unprecedented ways. In this fast-changing world, engineers need to be trained to manage the varied complexities and uncertainties of the modern world. In this context we need to face challenges as mentioned below

- To transform the mindset of students because of the conventional assessment methods in schools
- Lack of holistic view and learner centric approach for both students and faculty
- To recognize problems relevant to R&D organizations
- To identify patentable works
- To find the students status level to impart training for their placement
- To impart multidimensional capabilities to students
- To form join groups to identify the areas to be focused.
- To identify the industry oriented courses
- To promote domain projects in Industries.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The college is affiliated to Anna University (AUC), Chennai; Accredited by NAAC 'A' Grade, NBA

Accredited & ISO 9001:2015 Certified. The Institution follows the curriculum prescribed by the Anna University. The College ensures effective curriculum delivery through a well-planned and documented process. The Institute has perspective planning for effective implementation of the curriculum. Before the commencement of the semester, for proper execution of the academic activities, proper academic planning is done. Institute academic calendar is prepared in line with University academic calendar. Also Event calendar is prepared which include curricular, co-curricular and extra-curricular activities. The implementation of academic calendar and proper delivery of the curriculum is regularly monitored by HODs. Students' attendance is also monitored by subject teacher and mentor. Around 30% of new courses have been introduced by the University. All the programs offer elective courses and Choice Based Credit System (CBCS). Courses like Environmental studies, Human Values and Professional Ethics are included in the curriculum. Field trips and internships enrich intramural learning with life situations and industrial exposure. For the development of students, the institute arranges guest lectures, seminars, workshops and also initiates add-on courses. Structured feedback is received from students, parents, alumni and Employers. The same is analyzed and actions are being taken.

Teaching-learning and Evaluation

The Teaching-Learning-Evaluation process in the Institution is given the meticulous attention as indicated below:

Admission Process: The admission process of the college is managed by admission committee which is responsible for designing admission forms and prospectus and counseling of the students at the entry level.

Preparing Clear Course Plans/Course Schedules: Well-planned lesson plan was Prepared by the faculty and made available to the student through Student Information Portal. The teachers are deputed to participate in conferences, seminars, orientation and refresher courses to boost their teaching skills and make their teaching more innovative and effective.

IQAC of the College supported by the senior faculty members monitors all the curricular, co-curricular and extra-curricular activities in the college and ensures to provide all the necessary support to teachers and students for better teaching and learning processes.

The college has a well-organized and well planned teaching, learning and evaluation process. Before starting of the semester, teaching load distribution is finalized by considering the experience, choice of subject given by the faculty, faculty specializations and interest of faculty in particular subjects.

Conducting Orientation programmes for the first-year students familiarizes them with the opportunities available at the university and its expectations from them. Short term/refresher course like basic programming skills, Web based technologies, AutoCAD, embedded systems and many more such courses by various departments Value Added Courses are conducted.

Use of e-resources and ICT: Every classroom and laboratory has LCD projectors and access to the campus intranet giving access to the repository of lectures by experts.

Encouragement of Cooperative learning

During the course of time, a systematic evaluation process is used to assess the learning levels of the students.

This evaluation process consist of written examination, group presentation, project, practical examination with viva, written assignment, online Quiz and class performance.

Internal assessment: Continuous internal assessment system is conducted either through class tests, presentations, and assignments, non-formal assessment based on observation of individual student's participation in group work, classroom learning and initiatives. This assessment gives enough scope to the students to improve their performance and analyze their progress on a time to time basis.

Research, Innovations and Extension

The Institution creates an Innovative Ecosystem to foster research activities by providing the essential research facilities and support. The Research Committee encourages the Teachers and Students and supports them to contribute more for the research activities to carry out Innovative and Socially relevant projects, to present and publish papers, to guide aspiring research scholars, to collaborate with Industry for developing new product, it motivates the Teachers for patent filing and commercialization and also encourages the faculty to organize Industry Oriented Programmes and certification courses for the students to promote Industry-Academia Innovative practices. The SAEC-IIC encourages, inspire and nurture young students by supporting them to work with new ideas and transform into prototypes.

The Research, Innovation and Extension activities during the past five years are

- The Institution received a Total Grant of 191.77 Lakhs for 97 Projects sponsored by Government and Non-Government agencies like AICTE, CVRDE, DST, ISRO, BRNS, TNSCST, IEEE, ISTE and CSI. The institution also encourages the Faculty and students by sponsoring the Best Innovative projects to meet the needs.
- Establishment of 4 Research centres approved by Anna University, Chennai and 43 scholars have been awarded as PhD.
- The Institution has an Incubation Centre, SAEC-IIC, Centre for Intellectual Property Rights to nurture innovations, entrepreneurship and enterprises for societal benefit.
- The Institution has 4 Centre of Excellence which carries out Innovative projects to develop new products and published papers
- The Institution motivates the Faculty for developing innovative products and to produce more patent. The Faculties have published 6 patents, filed 4 patents and received 3 grants.
- Number of workshop/seminar conducted on Intellectual property rights and Industry –Academia Innovative practices are 358.
- The Institution encourages the Faculty and students who receive State/National/International recognition and awards by providing Incentives and appreciation certificate. Received 29 awards from recognised bodies
- The Institution has a Research Cell which follows the Code of ethics framed by the Anna university and has a software to check for the plagiarism.
- The Faculty have published 250 papers in a reputed Journals and also published 281 Books and Chapters in edited volumes/books

Infrastructure and Learning Resources

The Institution was established by the Dharma Naidu Educational & Charitable Trust in the year 1998-1999. The college is approved by AICTE Delhi and affiliated to Anna University, Chennai, Tamil Nadu. The college has excellent infrastructure and learning resources including 54 ICT enabled classrooms and seminar halls, 62 fully equipped laboratories and other support facilities.

The college offers 6 U.G programmes and 7 P.G programmes. Four U.G Programmes has been recognized as research centre by Anna University, Chennai.

The Institution is provided by 100 Mbps internet facilities. The College is Wi-Fi enabled campus. The physical facilities consist of classrooms, seminar halls, laboratories, Alumni cell, Placement and training cell, Sports centre, Students Activity centre, Library, etc... Spacious and well-ventilated library with a collection of books, rare books, manuscripts, special reports, E-books, E-journals, Videos etc. The College Central Library is an institutional member of prestigious libraries such as the DELNET, AICTE – ELSEVIER, AICTE – IEEE Delhi.

The Budget for infrastructure, Physical, academic and library resources are earmarked annually based on the recommendations of respective committees constituted for upgrading, maintaining and utilizing the budget. The college upgraded its IT facilities including software, Server Configurations etc. Totally 1099 systems are provided to the entire department labs with configurations of core i3 Generation 4GB, 500 GB hard disk with LAN connectivity are available to carry out academic and administrative work. Fire Safety equipment is maintained in the campus as precautionary measure.

The college provides excellent, well furnished and comfortable hostel accommodation separately for outstation boys and girls with strict overall supervision of the management. The Maintenance of Physical, Infrastructural, academic and support facilities has been carried out regularly. Power supply capacity is about 1250kva HT supply, with two gensets capacity of 250 kva and 125 kva for uninterrupted power supply. These power systems are serviced periodically to avoid inconvenience during failure. To ensure hassle free and safe transportation to staff and students, Institution provides transports to all major routes in and around Chennai, Kanchipuram and Thiruvallur.

Student Support and Progression

In tune with Our Institution's Vision of imparting updated technical education with character building, utmost efforts are taken to provide necessary support to students, to enable them to develop all round skills. To assist the financially needy students the Institution facilitates such students to avail SC/ST, BC/MBC and FG scholarships offered by the Government. About 52% of the students have been benefitted by this. Besides many students also benefitted by the Sakunthala Ammal merit scholarship provided by the Institution for academically bright students. Institution facilitates the students with career guidance programmes, placement training and technical training programmes to improve their employability skills besides communication skills development. . Institution has Professional counsellor for personal counseling to the needy students. Yoga and

meditation programmes are conducted. Institution also has Anti-ragging committee to ensure ragging free campus. Women empowerment cell ensures prevention of sexual harassment.

The Institution has placement cell and training cell to ensure students progression after their graduation. On an average 70% of the students find placements immediately after graduation. Also some of the students move to the higher education and successful in competitive examinations.

To ensure all round development of the students they are encouraged to actively participate in extra-curricular activities. Institution organizes various kinds of cultural activities and sports events besides Institute level competitions. Many of our students have won prizes at state or National level in various sports competitions. Students are given representation in various committees such as class committee, professional societies, and Alumni committee etc. to play constructive roles in academic and administrative matters.

The Alumni provide a strong support to our institution. The Alumni Association conducts alumni meetings every year to elicit support and suggestions from alumni for the betterment of the students. They are invited to offer guest lectures, career guidance and counseling to our students so that students are motivated and also exposed to current trends in various fields of Engineering and management. Alumni also help out the students in getting placements also. In recognition of meritorious services of our alumni the Institution selects such alumni and awards them with 'distinguished Alumni award'.

Governance, Leadership and Management

The Vision and mission statement reflects the institution's distinctive characteristics to train the students to face the global challenges, undertaking into creative ideas through research activities & to develop products and procedures based on societal needs. Our College has formally stated quality policy which has been formulated based on the vision and mission of the college and is the guiding force that helps departments to plan their activities. The ISO process followed in the college prepares perspective plans and policies based on the quality policy and activities proposed by various departments for the academic year. This action plan is submitted to the Management for approval and implementation. It is reviewed by two internal audits and one external audit per year. S.A.E.C. is committed to provide quality Technical education, Training, Research and Development activities through improved and effective utilization of Physical and financial resources & Quality improvement and stability of staff and inculcation of high moral, ethical and professional standards among our students thus improving their overall personality. The institution ensures the professional development of the staff by planning and executing programmes that address professional development, Career development, personal development of faculty members. Our Institution has an effective Financial management system through Internal and External audit. IQAC aims at imparting value based education and continuous evaluation of academic performance, Organization of workshops, seminars on quality related themes and promotion of quality circles, The feedback responses from students, parents and the stakeholders for corrective action for if any deviation in academic practices and Promoting the activity relating annual quality assessment. Our Institution conducts meetings like Governing council, Academic council, IQAC, MRM, Institutional, Staff and Class committee meetings.

Institutional Values and Best Practices

The college takes utmost care for the women and conducts various gender equity programmes for the welfare of the staff and students. Programmes like Awareness Programmes on legal rights, social media, programme on

Health and Hygiene, Karate classes on self defence, women's day programmes, Yoga, programme on grooming and confidence and guest lecture on social media harassment alleviation were conducted taking their well-being into account. Photos have been added as a supportive information. Safety measures provided for the safety and security of the every individual and many programmes conducted to bring an awareness in the students to take care of themselves. In view of keeping the students and faculty unscathed the entire institution (including the hostels) is under cctv surveillance. The college gives lot of importance to environmental consciousness and sustainability. Initiatives have taken to convert CFLs to LEDs.

Various types of waste management practices have been adopted for different types of wastes, the e-wastes are collected and scraped to M/s. Virogreen India Pvt. Ltd.

Rain water Harvesting is done in the college. A detailed description has been given including the channelization of the pipes along with the pipe sizes. Photo has been attached as additional information for this. Green practices are followed in the campus. The statistical picture of the expenditure involved in green initiatives and waste management is elaborated. Initiatives have been taken during the last five years to address locational advantages and disadvantages. It also describes the facilities available for the differently abled students.

A detailed description on code of conduct exists for students, teachers, governing body and administrative authorities and support staff is hoisted in the college website.

Our Colleges gives due importance for universal values, national values, human values, national integration, communal harmony, social cohesion, also national festivals, programmes on birth / death anniversary of great personalities are organized.

The college has approval of the statutory bodies / regulatory authorities pertaining to which the institution functions.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	S.A. ENGINEERING COLLEGE
Address	Poonamallee-Avadi Main Road, Veeraragavapuram, Thiruverkadu post,
City	CHENNAI
State	Tamil Nadu
Pin	600077
Website	www.saec.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Professor	N.ANUSHA	044-26801999	9941165566	-	iqac@saec.ac.in
Principal	G.S.KUMAR ASAMY	044-26801499	9444035504	044-2680189 9	saec@saec.ac.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

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

Establishment Details				
Date of establishment of the college	01-06-1998			
University to which the college is affiliated/ or which governs the college (if it is a constituent college)				
State	University name	Document		
Tamil Nadu	Anna University	View Document		
Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC	01-03-2018	View Document		
12B of UGC	01-03-2018	View Document		
Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	29-04-2019	12	Extension of approval by AICTE for the current academic year

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	Yes autonomydoc_1571734992.pdf
If yes, has the College applied for availing the autonomous status?	Yes

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Poonamallee-Avadi Main Road, Veeraragavapuram, Thiruverkadu post,	Rural	25.58	45402.72

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/ Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	Pass in HSC or Senior secondary school or Diploma from Recognised board or equivalent	English	60	7
UG	BE,Computer Science And Engineering	48	Pass in HSC or senior secondary school or Diploma in recognized board or equivalent	English	180	166
UG	BE,Electronics And Communication Engineering	48	Pass in HSC or senior Secondary School or Diploma from recognized board or equivalent	English	180	66
UG	BE,Electrical And Electronics Engineering	48	Pass in HSC or senior secondary school or Diploma from recognized board or equivalent	English	180	13
UG	BE,Mechanical Engineering	48	Pass in HSC or senior Secondary School or Diploma	English	180	23

			from recognized board or equivalent			
UG	BTech, Information Technology	48	Pass in HSC or Senior Secondary School or Diploma from a recognized board or equivalent	English	60	53
PG	ME, Computer Science And Engineering	24	Pass in related engineering discipline	English	18	4
PG	ME, Electronics And Communication Engineering	24	Pass in related engineering discipline	English	18	3
PG	ME, Electrical And Electronics Engineering	24	Pass in related engineering discipline	English	18	3
PG	ME, Mechanical Engineering	24	Pass in related engineering discipline	English	18	0
PG	MBA, Master Of Business Administration	24	Pass in any degree	English	120	117
PG	MCA, Master Of Computer Applications	36	Pass in any degree with mathematics at HSC level or Degree level	English	30	2

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	24				40				140			
Recruited	14	10	0	24	15	25	0	40	58	82	0	140
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	24				40				140			
Recruited	14	10	0	24	15	25	0	40	58	82	0	140
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				171
Recruited	112	59	0	171
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				171
Recruited	112	59	0	171
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				44
Recruited	26	18	0	44
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				44
Recruited	26	18	0	44
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	14	10	0	3	3	0	0	0	0	30
M.Phil.	0	0	0	1	7	0	7	27	0	42
PG	0	0	0	11	15	0	51	55	0	132

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	1		0		1

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
PG	Male	86	3	0	0	89
	Female	48	4	0	0	52
	Others	0	0	0	0	0
UG	Male	273	2	0	0	275
	Female	99	5	0	0	104
	Others	0	0	0	0	0

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

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	35	51	59	66
	Female	21	31	40	48
	Others	0	0	0	0
ST	Male	1	0	1	0
	Female	1	1	1	1
	Others	0	0	0	0
OBC	Male	348	488	499	526
	Female	172	253	275	287
	Others	0	0	0	0
General	Male	71	65	54	65
	Female	32	45	45	50
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		681	934	974	1043

3. Extended Profile

3.1 Program

Number of courses offered by the institution across all programs during the last five years

Response: 434

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17	2015-16	2014-15
12	13	13	13	13

3.2 Students

Number of students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3083	3494	3486	3495	3217

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
598	643	735	910	941

File Description	Document
Institutional data in prescribed format	View Document

Number of outgoing / final year students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
995	1049	888	942	744

File Description	Document
Institutional Data in Prescribed Format	View Document

3.3 Teachers

Number of full time teachers year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
204	268	260	252	239

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
204	268	260	252	239

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 71

Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
1204.6609	1358.337	1376.369	1205.250	1340.124

Number of computers

Response: 1099

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The institution ensures effective curriculum delivery through a well planned and documented process

Response:

- The college is affiliated to Anna University (AUC), Chennai; Accredited by NAAC 'A' Grade, NBA Accredited & ISO 9001:2015 Certified Institution follows the curriculum prescribed by the Anna university. The College ensures effective curriculum delivery through a well-planned and documented process
- Academic calendar is prepared to include internal Assessment test schedule, Unit test schedule, university examination schedule , department and Institution level activities like professional society, Alumni chapters, workshop, guest lecture, conference, symposium etc.,
- **The academic calendar** is prepared well in advance and **circulated** to all the Staff members.
- The **subjects are allotted** to the staff members as per their interest.
- The **lesson plan and instruction plan**, indicating the topics covered lecture wise, for each and every subject is prepared by the faculty before the commencement of the semester and it is duly approved by the Head of the Department and Head of the Institution.
- **Question banks, Lecture Notes and Lab Manuals** are prepared by the Staff members verified by Academic Excellence Committee and also provided to the students.
- Question Banks, Lecture notes and Lab Manuals are uploaded in the web portal well in advance which helps the students to improve Learning Process.
- **Academic Excellence Committee** ensures effective delivery of the curriculum by proper implementation of the plan.
- **Time table** for various classes is prepared by the time table in-charge.
- Teachers can strengthen their knowledge in the subjects listed in the curriculum during summer and winter vacation period by attending the **Faculty Development Programmes**
- **Course files** are maintained by all the faculty members for the subjects handled which contain all the documents necessary for the implementation of the action plan.
- **Student's attendance** for individual course has been monitored through faculty Log book and also maintained by software
- **Class committee meeting** is conducted to monitor the progress of theory and laboratory courses
- Examination process, standard question paper, proper evaluation and dispatching of reports to parents will be done systematically.
- **Slow learners** are identified based on their test performance and class room interactions, extra support is provided to them through additional input by coaching classes.
- Assigning the teaching faculty for **mentoring students** on academic as well as personal issues to a better learning atmosphere.
- **Industrial visits** are encouraged to provide real time exposure to the students.
- All the **laboratories are well equipped** and periodically updated to enable the students to gain proper practical knowledge on the theory in line with the curriculum.
- Institution provides teaching aids such as **LCD projectors, Smart board** and NPTEL access for effective curriculum delivery.

- **Bridge courses** are organized and conducted for the first year students to understand basic concept of Mathematics and Engineering in different disciplines.
- A choice of **elective subject** to be opted in final year is taken from the third year students during their end semester examination.
- Monitoring of **project work** of final year students is also done periodically

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 28

1.1.2.1 Number of certificate/diploma programs introduced year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
8	7	6	4	3

File Description	Document
Details of the certificate/Diploma programs	View Document

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 186.02

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
92	93	64	114	92

File Description	Document
Details of participation of teachers in various bodies	View Document
Any additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

Response: 28.34

1.2.1.1 How many new courses are introduced within the last five years

Response: 123

File Description	Document
Details of the new courses introduced	View Document
Any additional information	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

1.2.2.1 Number of programmes in which CBCS/ Elective course system implemented.

Response: 12

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Any additional information	View Document

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years

Response: 18.86

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
801	924	619	456	356

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

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

Response:

In order to integrate the cross cutting issues relevant to gender, environment and sustainability, human values and professional ethics, University has imbibed different types of courses in the curriculum, some enhance professional competencies while others aim to inculcate general competencies like social ðical values, human values, environment sensitivity etc., thereby leading to the holistic development of students.

The list of core courses are:

- Environmental Science and Engineering
- Renewable Energy Systems laboratory
- Waste water engineering
- Irrigation and environmental engineering drawing
- Water and waste water analysis
- Renewable sources of energy
- Disaster Management
- Human Rights
- Professional ethics in engineering

are embedded in the curriculum of all UG & PG programmes. The students undertake a number of activities to inculcate these values.

1. As per Anna University norms Students have a compulsory course on Environmental Science and Engineering course of 4 credits is included of all UG programmes. In order to sensitize students about the environment and sustainability issues, a number of activities such as seminars, workshops, guest lectures, industry visits and field excursions are organized for students of all programmes. Various programmes on various aspects of environment sustainability are organized periodically
2. Special lectures are arranged by renowned people to instil moral and ethical values among students.
3. Subjects on Environmental Studies, Professional Ethics are introduced in the curriculum to create awareness on environmental issues and build up moral and ethical values among the student community.

The curriculum also includes courses on human rights

1. Equal opportunities are given to both the genders in terms of admissions, employment, training

- programmes, sports activities etc., and so gender issues do not arise
2. Girls and boys are participated in various co-curricular activities such as paper presentations, and technical quiz programmes.
 3. Women protection cell is established in the college to look into the problems of girl students as well as lady staff members. Awareness programmes were also conducted on health & hygiene, women harassments for both students and staffs.
 4. International women's day is celebrated, girls are encouraged to participate. Gender Sensitization Discussions, debates and guest talks are organized in the issues related to gender sensitization. Faculty and students have delivered talks on Role of a citizen for women empowerment.

Awareness programs are also initiated by NSS and YRC, which extensively carry out activities for environmental protection and ecological preservation

File Description	Document
Any Additional Information	View Document
Link for Additional Information	View Document

1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years

Response: 114

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 114

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document
Brochure or any other document relating to value added courses.	View Document
Any additional information	View Document

1.3.3 Percentage of students undertaking field projects / internships

Response: 34.35

1.3.3.1 Number of students undertaking field projects or internships

Response: 1059

File Description	Document
List of students enrolled	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.4 Feedback System

<p>1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and 5)Parents for design and review of syllabus-Semester wise/ year-wise</p> <p>A.Any 4 of the above</p> <p>B.Any 3 of the above</p> <p>C. Any 2 of the above</p> <p>D. Any 1 of the above</p> <p>Response: A.Any 4 of the above</p>	
File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document

<p>1.4.2 Feedback processes of the institution may be classified as follows:</p> <p>A. Feedback collected, analysed and action taken and feedback available on website</p> <p>B. Feedback collected, analysed and action has been taken</p> <p>C. Feedback collected and analysed</p> <p>D. Feedback collected</p> <p>Response: B. Feedback collected, analysed and action has been taken</p>	
File Description	Document
Any additional information	View Document
URL for feedback report	View Document

NAAC

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 0.48

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
26	09	16	16	12

File Description

Document

List of students (other states and countries)

[View Document](#)

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 72.58

2.1.2.1 Number of students admitted year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
681	934	974	1043	1040

2.1.2.2 Number of sanctioned seats year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1272	1290	1290	1290	1290

File Description

Document

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 58.61

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

2018-19	2017-18	2016-17	2015-16	2014-15
257	378	457	525	672

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

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

The college follows various strategies to enhance the students learning skills. During the induction day the parents and students are enlightened about the course, the various rules and regulations of the college. **Bridge course** is conducted where the newly admitted students get an insight of the basic **ideas about the course**, so there will be a smooth transition from school life to college academics.

Students counseling plays a very important role to assess the learning levels of the students. Periodic counseling is given by the respective faculty advisors and the slow learners are identified, they are motivated and guided to improve in academics. Periodically class committee meetings are held and difficulties if any are discussed and analyzed. To improve the performance of students, question bank with answers are provided. The performance of the students after every test is sent to the parent. The faculty advisors discuss the performance of the test with their parents to lend their support from their part.

Remedial classes are conducted for the slow learners where individual care is given, special revision is given before the university exams also.

In addition, motivation is also given by Professional Counselor in each semester through counseling.

To cater to the advanced learners **guest lecturers** are conducted regularly where students interact with eminent personalities. Students are motivated and guided by the staff members to participate in **workshops, conferences, symposium and other competitions.**

Students are **members of various professional bodies**, they are guided to organize symposiums and to take up competitive exams.

Students are motivated to enroll in **online learning like NPTEL and to take up internships.**

For Slow learners:

- Bridge Course (For 1st Year UG & PG)
- Student counseling
- Remedial classes
- Motivation by Professional Counselor
- Giving practice assignments
- Organizing Extra Classes during the semester
- Providing extra reading material to improve basic understanding of subject.
- Interaction with parents with periodical update through SMS.

For Advanced Learners:

- Participation in workshops, conferences, symposium
- Online learning like NPTEL
- Internships
- Inter Department Technical Contest
- Institute Industry Interaction
- Seminars

Student Information Portal

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.2.2 Student - Full time teacher ratio

Response: 15.11

File Description	Document
Any additional information	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0

2.2.3.1 Number of differently abled students on rolls

File Description	Document
Institutional data in prescribed format	View Document

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

Response:

Class Room Lecture and Interactive learning:

Ø The faculty use chalk and board and audio visual aids in teaching. Students are also encouraged to actually interact during the lecture hour by getting the doubts clarified on the spot. In addition to class room learning our students are encouraged to for experiential learning, participative learning and problem solving.

Experiential Learning:

- **Industrial visits** are arranged for our students once in a semester.
- **Internship:** Students are encouraged to attend internship programme in industries.
- **Field trip** is arranged usually for IV year students for getting knowledge from industries.
- **Projects:** During the period of study in the 6th to 8th semester, many real time projects are given to the students and they are guided by both faculty and Research personnel. Many of the final year UG and PG projects are Industry based real time projects.
- **Value added Course:** Students are taught advanced versions in Software like Oracle, MATLAB, PLC/SCADA, E TAP , R Programming, Cloud Computing, Hadoop System in various semester

Participative Learning:

Student Seminars and Guest Lectures:

- **Student Seminars and workshops** are conducted to improve their learning skills and
- **BEC Training classes** are conducted to improve their communication skills.
- **Guest Lectures** are conducted by inviting eminent persons from Industry and Academics.
- **Alumni students are invited for technical talk** and interact with the students.
- Students are formed into group and assigned some Power point presentation, seminars and poster presentation on a specified topic
- **Placement training periods** are allotted for higher semester students and they are trained by professional trainers to ensure them to be placed in good companies.
- Extensive awareness is created among the students about the openings in different public

sector undertakings and the **National Level examinations for Government services.**

Problem solving:

Students will do 2 to 3 laboratory courses per semester from 1st to 7th semesters for applying a theoretical knowledge thought in a class room for problem solving in laboratories such as Programming laboratories, electrical and mechanical engineering laboratories.

- More than the required number of experiments, beyond the minimum specified by the university is performed.
- All the laboratories have excellent facilities, both hardware and software based. For the experiments detailed instruction manuals are provided.
- Tutorial hours are allotted in time table for solving problems in problem oriented courses in Engineering Programme.
- Mini Projects
- Intra Department Technical Competition
- Hackathon Contest

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 98.04

2.3.2.1 Number of teachers using ICT

Response: 200

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	View Document
Provide link for webpage describing the " LMS/ Academic management system"	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 20.97

2.3.3.1 Number of mentors

Response: 147

File Description	Document
Any additional information	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

Innovation and Creativity in teaching- learning

ICT:

Today's society shows the ever-growing computer-centric lifestyle, which includes the rapid influx of computers in the classroom. Information and Communication Technology can contribute to universal access to education, equity in the delivery of quality learning and teaching, teachers' professional development and more efficient education management.

Instructional Methods:

Apart from Chalk and Black Board teaching method, some of the following methods are also used by the Faculty members to help the students for learning the subjects.

- **SMART Class rooms** and Exclusive seminar halls are available to have interactive sessions for all subjects.
- **NPTEL video Lectures** are available in the Department and the Main Library where the

students can access learning materials at any time.

- **Web based learning** with access to online Journals and E books.
- The learning materials for every Course are available in the content server of the College

which can be accessed by the students through the Internet facilities using **Wi-Fi** available during the College hours.

Model Based Teaching:

- Faculty members use models (during lab hours) wherever required to explain the contents.
- Models based teaching for Subjects such as Electrical Machines and Design of Electrical machines to explain the operation and design of machines is planned during the beginning of the semester and it is made part of the content delivery.
- Power point presentations are done by the faculties to make the students to understand some concealed concepts in subjects like Electromagnetic theory.
- This motivates the students well, makes them interactive and influences them to prepare

their own models and mini projects.

- **Animation / Graphics** and **NPTEL Videos** are used for explaining complex topics.

Students Projects:

- Students are instructed to do the Projects and mini projects based on the knowledge gained from various subjects like **Programming, Cloud Computing, IoT, Micro Processors and Micro Controller, Embedded systems, Machines, Power Electronics and Power systems.**
- Students are motivated to go for **in-plant training** during every semester holidays to have hands on experience.
- Students are motivated to work socially **relevant projects.**

Value added Course:

- Students are taught advanced versions in Software like Oracle, MATLAB,
 - PLC/SCADA, E TAP, Python, Java, R Programming, Cloud Computing, IoT, Hadoop System in various subjects.

Competitive Exams:

- For **GRE/GATE/TOFEL Exams**, students are provided training to enrich them for getting admission in **USA, UK, Canada, Australia, New Zealand, etc.** countries.
- Extensive awareness is created among the students about the openings in different public

sector undertakings and the **National Level examinations for Government services.**

Modern Practices:

- The data base of each student is maintained in PALPAP software for the welfare of

the students. Students academic performance reports is sent to their **parent's mobile through PALPAP software.**

- Students are given **separate user ID** to view their internal marks details and to download their learning materials.
- Student innovations were **updated and shared in the student blog** of official website.
- Students are given **online assignments** to improve their skills.
- Students are engaged with **Virtual Classrooms** to receive the lectures provided by Faculty.

File Description	Document
Any additional information	View Document

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 13.46

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
31	37	35	31	30

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document

2.4.3 Teaching experience per full time teacher in number of years

Response: 10.18

2.4.3.1 Total experience of full-time teachers

Response: 2076.45

File Description	Document
Any additional information	View Document

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 47.83

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
27	41	43	4	2

File Description	Document
Institutional data in prescribed format	View Document
e-copies of award letters (scanned or soft copy)	View Document
Any additional information	View Document

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 0.59

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	0	2	2	1

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

University guidelines are strictly adhered to with respect to evaluation process. There are two unit tests and three internal assessments conducted. The schedules of unit tests and internal assessments are communicated to students and faculty in the beginning of the semester through institute academic calendar which is prepared based on the university academic calendar. Before a week internal exam time table is displayed on the notice board.

- Questions are framed, such that they adhere to Anna University standard. It follows the **Bloom's Taxonomy** and **Outcome based Education** in which CO's are attained.
- There are 6 Course Outcomes (CO's) for each subject. The first unit test covers one CO from unit I, second unit test covers one CO from Unit III internal assessment question paper is prepared in which first internal assessment test covers two CO's from unit I and II, second internal assessment test covers another two CO's from unit III and IV, third internal assessment test covers all the five

CO's from all five units

- The subject handling faculty prepares two sets of question papers that covers equal number of questions from each unit, covering all the topics with one compulsory question from any of the unit
- Department **Question paper evaluation committee** under the guidance of HOD, checks for the standard of the question paper.
- **Principal** along with college **Exam Cell coordinator** selects the final internal question paper for each subject from the question paper sets.
- Question papers are given to the internal exam coordinators of the department on the day of test, after approval from the Principal.
- Central Internal assessment exams are conducted by the exam cell of institute with invigilation duties from various other department faculties are allotted by exam cell to maintain strict and transparent conduction of exams
- Internal exam coordinator ensures smooth conduction of test and proper valuation of internal books.
- Faculty prepares the answer key / Scheme of evaluation and it is documented with a copy of sample question paper for the future reference.

Internal assessment tests and other measures taken to judge the performance of students is done fairly and in an effective manner. Students are allowed to go through the valued answer scripts of internal assessment tests and doubts regarding evaluation are cleared. Internal Test performance are **intimated to the parents via SMS to their mobile numbers**

Whenever class tests, internal assessment tests are conducted the results of the students' performance are used by the faculty to identify slow and advanced learners. Students are encouraged to improve their performance in future by counseling. The mentors and advisors of the students, nearly 20 students are entrusted to each faculty member. The mentors sort out the personal issues, academic and non-academic problems of their mentees and provide counseling and guidance.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

Institute is affiliated to Anna University, Chennai, the rules and regulations for evaluation process are laid down by the affiliating University and are communicated to students through syllabus copies supplied in the beginning of first year of their academic program.

- **Syllabus for internal assessment** will be communicated to students well in advance.
- **The schedules of internal assessments** are communicated to students and faculty in the beginning

of the semester through institute academic calendar.

- **Schedule for end semester examinations** will be communicated during the semester as and when schedule is released by the University.
- The **internal assessment evaluation process** is communicated to students by the respective faculty and also during orientation programme for first year students.
- Students are given general instructions regarding the evaluation methods of University answer scripts. The periodic instructions issued by the university are promptly communicated to the students.
- The mentors are entrusted with the duty of providing awareness among the students regarding this.
- Further any changes in the evaluation process will be communicated to students and faculty through circulars.
- **Question papers are set based on Course outcomes** and are approved by heads of the department.
- Scheme and Solution are prepared by the faculty on completion of the assessment.

Theory subjects are assessed through:

1. Two unit tests and Three internal Assessment tests
2. University external test
3. Assignments
4. Seminars

Practical subjects are assessed through:

1. Model practical tests
2. University external lab exam
3. Mini projects

Projects work assessment:

Faculty members encourage students to do in house projects. They will be provided with necessary hardware and software support. The project assessment is done through:

- Four Internal project reviews
- Final external university project review

We also encourage them to display their projects in Department Project exhibition. Students are also encouraged to present their project ideas in conferences and also publish papers in Journals

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and

efficient**Response:**

At the college level, an examination committee, comprising of a senior teacher as convener and other teaching and non-teaching staff as members, is constituted to handle the issues regarding evaluation process.

- The college follows strictly the guidelines and rules issued by the affiliating university while conducting internals and semester-end examinations
- **Two Unit tests and Three internal assessment** tests are given during each semester,
- **Time table** for which is prepared well in advance and communicated to the students earlier.
- **Seating plan and table marking** is followed even for internal assessment tests and it is displayed on the notice board along with the internal assessment time table.
- After evaluation of internal assessment **answer scripts**, the scripts are given to students to have an idea of their performance in the test.
- If they come across any doubts, clarification is given which enables them to fare better in future.
- By adopting the criteria as per the direction of affiliating university, **complete transparency** is maintained in internal assessment tests.
- Students and faculty members are made aware of the transparency to be maintained in the system of assessment.
- This further enhances the transparency and rapport between faculty members and students.
- After preparing the assessments report it is shown to the students, if any grievances is there it can be resolved immediately and submitted by the concerned faculty to the department, the copy of the same is uploaded in the Anna University at the end of semester.
- A Centralized exam cell system is followed. The head of the exam cell is principal of the college where the university exam related queries can be solved.
- Any grievances related to university question paper like out of syllabus, repeated questions, improper split of marks, marks missed, wrong question number during semester exams are addressed to the principal, after making an analysis of day by day university question papers by the subject handling faculties with Department Head in turn he proceeds the same to the university immediately. Review on the question papers are made by faculties to find out the percentage of toughness in the question paper and the feedback is given to the department Head
- University decision or information after resolving the grievances is intimated immediately to the concerned departments, once it is obtained through the principal. It is also conveyed to the students through class coordinators and subject handling faculties.
- If student has any grievances related to evaluation of university answer scripts are intimated to the subject handling faculty and head of the department if necessary.
- The **revaluation** is applied for answer scripts, in which the re-evaluated marks can be obtained during the announcement of revaluation results of the same semester.
- In order to maintain transparency, students can apply for photo copy of their answer script and they may decide on re valuation/re-totaling.
- Consulting with the subject handling faculty and Department HOD ,challenge Revaluation can also be applied by the students as the last re-evaluation approach.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

The institute being affiliated to Anna university, Chennai, the university releases the calendar of events for the affiliated colleges at the beginning of every semester, which includes start and end semester dates of the semester and schedule of examination. In accordance to university calendar the Institute Academic excellence cell prepares the detailed calendar of events at the institute level.

The academic calendar is prepared by the AEC coordinator which is further approved by the principal and provided to all the teachers and students at the beginning of the semester.

It includes the end dates of the semester and re-opening dates of the subsequent semester, value added course, commencement of internal tests, important functions of the college, and Government and institutional holidays.

The college announces academic calendar twice in in an academic year which highlights the teaching days, evens planned for the semester.

The action plan for academic oriented activities like seminars, workshops, conferences to be organized, subject experts to be invited for guest lectures, cultural programs for various activities are presented in AEC meeting and submitted to the principal before the commencement of the academic year

The unit tests and Internal assessment tests are strictly conducted as per the guidelines of Anna University and as per academic calendar. Three internal assessment tests are conducted as per university norms and two unit tests are conducted as per college norms. After conducting each internal examination valuation should be completed with two days. The marks and evaluated booklets are verified by the students. In a week of internal examinations faculty advisors update the proctor cards which are discussed in parent teachers meeting and lack of attendance report is also sent to the parents through postal mail.

Based on the internal exam marks, weak students are identified and special coaching is given to them. In the special coaching is given to them. In the special coaching , the teachers explain the tough topics and make the students to write tests, in which university questions are given them to prepare

Students are evaluated continuously based on the Internal examinations and make them ready for university examinations

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

- The Program Outcomes are displayed on the website and efforts are made to attain all the POs to the maximum extent with University syllabus and additional activities.
- The PSOs are defined and they are made available on the website.
- The faculty frame course outcomes (CO) with guidance given from Programme Assessment Committee and lesson plan of the concerned course.
- The course outcomes of all the programme offered by the institution are displayed on the institute website, through this way the course outcomes are communicated to students and teachers.
- Course outcomes are also displayed on the class notice boards.
- Based on the course outcomes defined, the faculty maps the CO with the program outcomes (PO) and define levels.
- Effectiveness of teaching-learning process can be measured through learning
- outcomes which in turn are measured through the achievement of Programme Outcomes (PO) and course outcomes (CO).
- The CO-PO and PSO attainment is calculated at the end of every semester and corrective measures are discussed to increase the attainment further.

File Description	Document
COs for all courses (exemplars from Glossary)	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

Assessment methods are categorized into two as direct method and indirect method to assess CO's and PO's.

CO assessment methods are employed

- Direct assessment method and indirect assessment method are considered for 80% and 20% weightages respectively.
- Internal test assessment and end semester examination assessment are considered with the weightage of 20% and 80% respectively for the direct assessment of CO.

Internal Attainment is the average of attainments obtained using various internal assessment tools.

Total Attainment = 20% internal attainment + 80% university attainment

Attainment of Program Outcomes and Program Specific Outcomes

The assessment is done through one or more than one processes, carried out by the department, that identify, collect, and prepare data to evaluate the achievement of course outcomes (CO's) and eventually program outcomes (PO's).

PO Assessment Process

- **Direct assessment method** –The knowledge and skills learnt by the student are assessed directly from their performance through internal assessment and external assessment processes.
- **External assessment-** Performance of student is recorded in university theory exams, laboratory exams and project evaluation.
- **Internal assessment-** Performance of student is recorded through class assignments and tutorials, internal assessment tests, laboratory assignments, seminars and project progress review and evaluation.

These methods provide a sampling of what students know and/or can do and provide strong evidence of student learning.

Direct Assessment Tools and Process

Initially, the attainment of each course outcome is determined using internal as well as external (university exam) assessment. The each PO attainment of corresponding to a particular course is determined from the attainment values obtained for each course outcome related to that PO and the CO-PO mapping values.

Similarly, the values of PSO attainment are also determined.

- **Indirect assessment method** – This includes feedbacks from all the stakeholders such as student feedback, exit survey, alumni feedback, parent feedback, employer feedback and performance in extra co-curricular activities. Feedbacks are designed to assess the attainment of course outcomes by the engineering student.

Overall Attainment of POi; $O_i = 80\% \text{ of } D_i + 20\% \text{ of } I_i$

where D_i – Direct Attainment of each PO

I_i – Indirect Attainment of each PO

Attainment of Course outcomes for each subject obtained through direct assessment method is mapped to correlated program outcome. Also, Attainments achieved through indirect assessment method are also mapped with the correlated program outcome.

Finally program outcomes for entire course is assessed by taking weighted sum of direct and indirect assessment as

-
- Indirect assessment : Weightage: 20%

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.3 Average pass percentage of Students

Response: 92.76

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 923

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 995

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

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

NAAC

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

Response: 197.55

3.1.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
73.35479	19.38273	50.08456	52.42457	2.300000

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document
Any additional information	View Document

3.1.2 Percentage of teachers recognised as research guides at present

Response: 14.71

3.1.2.1 Number of teachers recognised as research guides

Response: 30

File Description	Document
Any additional information	View Document

3.1.3 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 2.04

3.1.3.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 100

3.1.3.2 Number of full time teachers worked in the institution during the last 5 years

Response: 245

File Description	Document
Supporting document from Funding Agency	View Document
Any additional information	View Document
Funding agency website URL	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

The Institution had created an Innovative Ecosystem to foster research activities by providing the essential research facilities and support. The various research facilities are

Centre for Unique Product Development and Business Incubation(CUB) and Centre for Innovation Promotion and Entrepreneurship Development(CIPED)

S.A.Engineering College has a CUB & CIPED to promote and support untapped creativity of individual innovators and to assist them to become technology based entrepreneurs.

S.A.Engineering College has applied a financial grant in the year 2014 for a Business Incubation Centre from Ministry of MSME,GOI. In the year 2015, SAEC has got sanctioned as business Incubation Centre considering the various facilities and experts available with the institutions. In the year 2016 around 25 Ideas was submitted by various Individuals for scrutiny . On various aspects are considered 10 Viable Ideas are shortlisted to submit to Ministry of MSME. During 2017, among the 10, 2 Ideas are clubbed with the similarities of the stream and the panel has accepted for 8 Ideas and a detailed phase wise plan was invited. During 2018 the Union Cabinet Ministry has decided to fund in full towards skill development thee Incubation projects submitted has suffered without fund.

S.A.Engineering College - Institution Innovation Council(SAEC-IIC)

The primary objective of SAEC-IIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform into prototypes. The various Functions are:

- 1.To conduct various innovation and entrepreneurship-related activities prescribed by Central MHRD Innovation Council in time bound fashion.
2. Identify and reward innovations and share success stories.
3. Organize Hackathons, idea competition, mini-challenges etc. with the involvement of industries.

S.A. Engineering college- Institute Innovation Council was inaugurated by Shri.J.Chandrasekaran, *Founder and CEO-WATSAN Envirotech Pvt.Ltd.* on *Thursday, 22 August 2019.* .Dr.Baskar highlighted the various activities of IIC such as IPR, Innovation, Internship, Start up, Social Media, ARITA and NIRF.

Motivation program was conducted on *Tuesday 24th September 2019* by Dr.Sevvel.P (Professor, Mechanical department, SAEC) on the topic “How to become a SMART INNOVATOR). Sixty students of interdisciplinary department attended the motivation program.

SAEC-IIC had organized an Innovation day on account of 88th birth anniversary of People’ President Dr.A.P.J. Abdul Kalam. Advisor Dr.S.Mohan expressed the importance of Research and Innovation in practical life and inspired the faculties and students by sharing his research and innovation experiences. Principal Dr.G.S.Kumarasamy felicitated the gathering and motivated the students to impose innovative ideas in their projects.

Centre for Intellectual Property Rights

The Centre for Intellectual Property Rights had set a MoU on the Tenth day of January, 2013 , between, IP DOME – IP Strategy Advisors in SA Engineering college. It plays a vital role in carrying out the functions such as

- Intellectual Property awareness among students, faculties through streamlined awareness campaigns, short-term Intellectual Property modules, seminars, workshops and conferences
- Providing Legal & Technical Assistance to them for protecting their IP and also for Patent & Design, Trademark, G.I. searching & filling facilities

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 373

3.2.2.1 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
82	100	75	64	52

File Description	Document
Report of the event	View Document
List of workshops/seminars during the last 5 years	View Document
Any additional information	View Document

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

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

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

File Description	Document
e- copies of the letters of awards	View Document
Any additional information	View Document

3.3.3 Number of Ph.D.s awarded per teacher during the last five years

Response: 1.4

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 42

3.3.3.2 Number of teachers recognized as guides during the last five years

Response: 30

File Description	Document
URL to the research page on HEI web site	View Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document

3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 4.01

3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
180	267	233	163	137

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

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

Response: 3.4

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

2018-19	2017-18	2016-17	2015-16	2014-15
172	205	151	165	139

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

S.A. Engineering College not only excels in Academics & Curriculum but also in other activities like NSS, YRC etc., for the holistic development of the student community. The NSS unit of S.A. Engineering College take part in various activities organized by the government. Since 2014-2015 we are regularly conducting Medical camp, Blood donation camp and many kind of awareness programs. The list of events conducted regularly is listed below from the Academic year 2014-15:

- Blood donation & Medical camp
- Tree plantation camps
- Cleanliness programme
- Awareness programmes for Social cause
- Awareness programmes for Health cause

Our college NSS unit conducts village camp to nearby villages. NSS student will stay and conduct cleanliness and village development programs for two or more days. Blood donation camp is conducted every year in association with Lions club and Aarthi scans. Cancer awareness program and International Yoga day are celebrated every year on 4th February and 21st June respectively. We are part of the prestigious event of India “National Integration Camp’ held at Alaggapa Chettiar Government Engineering College on 10 to 12th December 2018. NSS Special camp was conducted in and around Thiruvallur District on 6 to 12th January 2019. In association with research teams of every department, NSS student has made Organic Farms in our campus.

S.A.Engineering College also encourage the spirit of innovation and entrepreneurship for creating sustainable business ventures that contribute to the overall welfare of the society. Centre for Innovation, Promotion and Entrepreneurship Development (CIPED) is an entity, which helps technology start-up businesses with all the necessary resources / support that the start-up needs to evolve and grow as a mature business. Typically, CIPED provide incubates, the start-up businesses support with necessary infrastructure support, technology/ prototype development support & research assistance etc. The main objective of CIPED is to promote and support untapped creativity of individual innovators and to assist them to become technology based entrepreneurs. The Strategies Planned & In Progress are

- 1.From first year onwards Entrepreneurship Awareness Program for motivating them for Entrepreneurship
- 2.Second year students are encourage for Entrepreneurship Development Program so as understand the business environment

3. In Third year students are trained under management development Program for Domain Specific training for business specific idea generation
4. In Final year Workshops for Screening of Business Plan, Mentoring ,Counseling , Fund and Patent Assistance

The Purpose of Empowering girl students and women faculty the women empowerment cell is established at S.A.Engineering College. It enables women of SAEC to pursue their goals in a safe and supporting environment. The main functions of the cell are purely safeguarding the rights of female students, faculty and staff members. The cell conducts activities such as Awareness programmes, lectures, workshops, seminar and various competitions for the intellectual and social upliftment of women. The Women Empowerment Cell shoulders the responsibility of following the Mandatory Guide lines and directions regarding the security arrangements for Girl Students and Women staff of our Institution.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 42

3.4.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
14	6	12	9	1

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	View Document
Any additional information	View Document

3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 72

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

2018-19	2017-18	2016-17	2015-16	2014-15
14	13	14	17	14

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach programs conducted with industry,community etc for the last five years	View Document
Any additional information	View Document

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 85.63

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2388	3153	3328	2796	2734

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document
Any additional information	View Document

3.5 Collaboration

3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

Response: 1200

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
279	358	211	186	166

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 66

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2018-19	2017-18	2016-17	2015-16	2014-15
7	15	10	19	15

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document
Any additional information	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

Classrooms:

The institute regularly updates the physical infrastructure to meet AICTE / Anna University requirements. In Overall, the college has 71 classrooms/Tutorial Rooms, 62 spacious laboratories for all the six UG and two PG programmes. Modern laboratories are established in the institution for the conduct regular practical classes. The Institute has improved the teaching-learning process with contemporary aids and created 54 Technology Enabled Classrooms with LAN/Wi-Fi facility, LCD projectors, Smart boards etc., The smart class rooms and seminar Halls are used to conduct the special programmes like seminars, workshops, symposiums etc.

Laboratories:

All the Laboratories of the college are fully equipped with advanced equipments. Each department has its own computing facility with the latest software to meet their own requirements for carrying out academic and research works. Students are encouraged to pursue their study/project work in the emerging areas of research.

Library:

Spacious and well-ventilated library with a collection of 55982 books, 55982 unique titles, 41607 E-books, 1650 E-journals and 7413 CD's/DVD Videos. The central library and reading hall have a good capacity where 200+ users can seat and study comfortably. The library provides DELNET, IEEE, SCOPUS, NPTEL-SPOC Member and computers with internet facility for students and teachers.

Medical Facility

Health is Wealth. SAEC supports students health for which our management has approved for the setting up of medical clinic in the College premises. Dr. GNANAM M.B.B.S is taking in charge of servicing the sick students and staff.

Transport

The College has a fleet of 30 buses to transport students and staff from various parts of the city and its neighborhood areas to the College and back home.

Cafeteria and Mess

The multi-cuisine cafeteria of the College is a two-storeyed building which kindles the taste sense and caters to the hunger needs of Guests, Inmates, Visitors, Staff & Students. It can accommodate 400

members to dine at a time. In the College premises, Food Court and cafeteria offers a wide medley of hygienic, nutritious South Indian Vegetarian and Non-vegetarian wholesome edible food.

Hostel Facilities

Full-fledged hostel facilities for boys & girls students have been established inside the campus. It also provides good and safe facilities of lodging and boarding to cater to the needs of outstation students. It has full-fledged facilities with STD, ISD, Gymnasium, a reading room and a Computer room.

Discipline

S.A.Engineering College offers the students with advantageous atmosphere with state-of-the-art facilities, distinguished mentors and pleasant educational environment. The institution provides the employability and communication skills for the development of students. It provides quality education in an environment of discipline. The focus is on shaping students to become self-disciplined, self-dependent and self-confident individuals.

Student Centre

Student centres often become the heart of the campus. A student centre is one which embodies a community centre hosting multitude activities that serve living needs and recreation interests of the campus population while also reflecting and strengthening the campus's tradition and way of life. .

Bank and ATM

Allahabad bank, SAEC branch is sited within the campus, along with 24 hours ATM Service, to enhance the banking facility for the students and Staff.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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

Response:

The Physical Education Department is headed by *Dr.A.Ramakrishnan, Mr.S.MathewandMs.Thenmozhi* Facilitates for sports &games.Our College has **Secured Overall Fourth Position in Anna University Zone -1 Colleges in 2018-19.**

The Institution has adequate facilities for sports, games (Indoor,Outdoor) and Gymnasium.

The Department of Physical Education and sports which provides excellent sports facilities and fully equipped gym with multiple station for both Boys and girls. Students are given training in all sports and games to take part in Colligate, Inter-Collegiate, Zonal, Interzonal, All India Inter university, State and National level Competitions. The College Physical Directors regularly train the students in various games such as Ball Badminton, Basketball, Cricket, Volleyball, Kho-kho, Hockey Handball, Table Tennis etc.

To motivate sports players the college provides incentives like travelling allowance, dearness allowance, and sports kits to all the players. The provision of travelling funds under seed for national players is made available. The college also gives concession in tuition fee to the sports students.

Sports Outdoor and Indoor Games:

- Around 400 students of our college were participated in various sports and games Conducted by other colleges.
- 1200 students were engaged in the sports and games inside campus.
- Every year we organize SA trophy- State level Inter Collegiate and School level tournament for Basket Ball, Volley Ball, Table Tennis, Tennis, Ball Badminton and Chess was .A total cash prize of Rs.5,00,000 lakhs was awarded to winners.
- We Organize Anna University Inter Zonal and Zonal Tournaments.
- We conduct Annual Sports day and Intramural in our college during the month of March.
- Dr.A.Ramakrishnan will Coach Men team Hockey, Kabaddi, Basketball, Ball Badminton, Hand ball and Athletics.
- Mr. Mathew will Coach Men team Cricket, Football, Badminton KhoKho, Volleyball, Table Tennis.
- Mrs. Thenmozhi will Coach women team Table Tennis, basketball, Volley ball Ball badminton.
- Sports students are given two hours od for practice session in afternoon from 2.00pm to 4.00 pm

Sports Center

SAEC involved in the concentration of sports activities of the students and staff members, Students are encouraged to take part in various kinds of physical activities to keep their body and mind strong and alert. SAEC has Separate Sports Center inside the campus.

Gymnasium

Well equipped gymnasium is available within campus for students as well as faculty. Physical activity is good for your mental health. Regular exercise can also boost your self-esteem and help you concentrate, sleep, look and feel better.

Yoga Center

The Yoga centres help and enrich the student with enthusiasm and spiritual feeling. The student's performance is improved with positive attitude.

Cultural Activities

The S.A Engineering College has a vibrant celebration of cultural events. The cultural activities will

encourage the students to develop their multi-talents in various events like Solo Dance, Group Dance, Solo Singing, Group Singing, Mime, Essay Writing, Vegetable Carving, Rangoli etc., the talent of the students are exposed both in on-stage and off-stage events.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 76.06

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 54

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document
any additional information	View Document
Link for additional information which is optional	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 33.77

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
350.05	300.06	438.31	424.11	679.20

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
Audited utilization statements	View Document
Any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

S.A. Engineering College Central Library is Fully Automated with AutoLib Software Version 6.2 (Web Based) Integrated Library Management System. Total of 55982 Volumes and 20555 Tiles are available. In addition to which, the Central Library also subscribes 41607 E-Books, 122 Printed Journals, 1230 E-Journals, and 11 News Papers. Books are classified and arranged according to the Dewey Decimal Classification Order (DDC). In this fully automated library, students and staff members can search the books by author, title, Account No., Publisher or subject heading and their availability.

Central Library has a special facility called WEB OPAC which allows the user to search library holdings from any location with internet access. A user can access the bibliographic details of book from the WEB OPAC. In addition Library Provide the Mobil APP facility to members to searching the Resource like Books, Journals, Question Papers and E- Books, etc., Books Renewal and Reservation also made through Mobile App.

Central Library is registered member of National Digital Library (NDL, an initiative of MHRD, Govt. of India). NDL provides support for all academic levels including researchers and life-long learners, all disciplines, all popular form of access devices and differently-abled learners. It is being developed to help students to prepare for entrance and competitive examination, to enable people to learn and prepare from best practices from all over the world and to facilitate researchers to perform inter-linked exploration from multiple sources.

Library also has recorded videos of NPTEL course contents which will be useful for teacher training and through them improve the quality of students.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

To promote a spirit of continuous learning among its students, S.A. Engineering College assures peaceful and enriching hours in the Central Library. One of the major highlights of the S.A. Engineering College is its 1371.52757952 Sq.m air conditioned central library that has a seating capacity of 300. It has about 55732 volumes and 17310 Titles of books and 9329 E-Books. In addition to which, the library also subscribes 98 Printed Journals, 1643 E- Journals and 88 Magazines. In this fully automated library, students and staff members can search the books by author, title, Acc. No. Publisher or subject heading and their availability. Each student is given 3 library books at a time and they have allocated library hours/week. The S.A. Engineering College Central Library is an institutional member of prestigious libraries such as the DELNET, AICTE – ELSEVIER, AICTE – IEEE Delhi.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	View Document
Any additional information	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 15.5

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
16.62766	16.74137	14.94710	14.01009	15.1911

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.5 Availability of remote access to e-resources of the library

Response: Yes

File Description	Document
Any additional information	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 15.64

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 514

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Institution frequently updates its IT facilities including Wi-Fi

Institution has,

- Upgraded its IT facilities including Wi-Fi frequently as per the needs and requirements in the last five years.
- Upgraded the internet connection bandwidth with 100 Mbps.
- Maintained its IT facilities with upgrading the configurations of computers.
- Printers, scanners, smart boards, interactive LCD projectors, online admission process and various software.
- Enhanced the teaching and learning process through e-resources, NPTEL online courses, video lectures.

Description of IT facilities:**LAN facility:**

- There are data network switches (Giga byte), POE network switches (GB) for access points, CCTV cameras, Intercoms and 1 SOPHOS Cyberoam fire wall for content filtering users simultaneously.
- 100 Mbps of internet connectivity is shared across the campus

Server Configurations in Data Centre

- There are servers with Xeon E-5 version-2, 32 GB RAM, 1.2 TB hard drives, which are served as Domain Controller (DC), Additional Domain Controller (ADC), faculty biometric server and application servers.

Workstation

- Totally 1099 desktops are provided to the entire department labs with configurations of core i3 Generation 4GB, 500 GB hard disk with LAN connectivity are available to carry out academic and administrative work.

Software

- Genuine windows licenses, with window 7pro and windows XP. 375 Microsoft office standard and professional editions for departments are also available.
- We also use open source operating systems such as Ubuntu and CentOS. All windows systems are protected with anti-virus

Printers

52 Laser jet printers, 3 Xerox work centres and 12 scanners are provided across the campus for academic and administrative purposes.

WiFi

- Extendable Wi-Fi access points are placed in various places like Library, corridors, Labs, hostel, Canteen and outdoor.
- Wi-Fi access is provided to all the students which is monitored and controlled by SOPHOS

Cyberoam fire wall at the IT department for secure content access.

- All access points are routed to a Wi-Fi controller in the Data Centre where configuration and updates are maintained in a centralized fashion.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.3.2 Student - Computer ratio

Response: 2.81

File Description	Document
Any additional information	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

File Description	Document
Any additional information	View Document

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Any additional information	View Document
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 63.16

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

2018-19	2017-18	2016-17	2015-16	2014-15
864.758	974.746	867.068	723.610	659.374

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	View Document
Any additional information	View Document

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

Response:

Class Rooms/laboratory:

The laboratories are furnished according to the statutory rules. Regular cleaning of the machines has been undertaken by lab technicians. After utilizing lab, all the motors, generators, lathe machines were serviced periodically and the measuring instruments were calibrated to ensure its accuracy of measuring to perform the lab experiments effectively.

Before the commencement of the academic year, a lab audit is conducted and a report on the requirement of new equipment, replacement of the old equipment and modernization of machines/software is prepared along with requirement of consumables, non-consumables as per the university guidelines to conduct experiments. Regular inspection of machines is organized.

The breakdown of equipment is recorded and serviced with the approval of Head of the department and HOI. Replacement for the breakdown system will be replaced as early as possible. Installation of antivirus and firewall ensure that the software and system is secured. Entry register for all the labs and seminar halls are maintained for tracking and utilization. For system related trouble shooting, the technical staffs will examine the issues and sort out effectively for next usage. If the problem is minor, the technical support

staff of the lab will rectify it. For major failures, support from vendor is taken. Periodic maintenance is done by regular cleaning of the lab spaces, software updates and antivirus updates. The stock is verified for the available equipment's and discarded equipment's, by a meticulous stock verification process by HOD. Fire Safety equipment is maintained in labs as precautionary measure.

SPORTS

Institution's sports activities were carried out by our three physical directors effectively. Our institute is provided with spacious outdoor games such as basketball ground, volley ball, tennis ground separately and well maintained with world class quality measures. The spacious indoor games are also present in college premises. The sports equipments were well maintained periodically. To ensure our quality strength, we are conducting district level and overall zonal level matches in our institutions. The damaged sports equipments will be replaced immediately to assure the quality maintenance. Students are permitted to play at evening. On duty will be provided to practice for any competition. Students are permitted to utilize and take sports material with prior notice to the Physical Director. In case of any damage observed, the same is recorded in the register pending further action.

LIBRARY

Books are issued based on Software. Each student can take two books for a period of 15 days. Issue of has to be returned on or before the due date stamped on the slip pasted on the book. Reference books are to be reserved and will not be renewed and reissued. Borrowers are the complete responsible and have to replace with the same if they lost the books. If the books are lost, then the borrower replaces the books of the same edition or latest edition or pay double cost of the book after getting permission from the Principal. Toppers can access the library books for the whole semester of their tenure with no return date's constraints.

Power Supply and Electrical Maintenance

Power supply capacity is about 1250kva HT supply, with two gensets capacity of 250kva and 125 kva for uninterrupted power supply. These power systems are serviced periodically to avoid inconvenience during failure. Half yearly maintenance and annual maintenance were done regularly and records are maintained by supporting staffs. As an initiative of green technologies, we have provided 105kva of solar panels in order to utilize the electrical supply effectively and efficiently.

Power supply is maintained by our supporting staffs (Electricians) and electricity is maintained by electricity board/ captive gensets for 24hours. **solar 85kva, and 20kva, street light 25nos, 1250kva, 250kva 125kva.** A solar light are placed inside the campus for environmental sustainability.

Garden Maintenance

Tree plantation and garden maintenance are done by the gardener appointed by the institute. NSS, YRC maintain certain areas of the college clean and for planting of trees, certain areas are allotted for each department to maintain the trees and campus clean and green.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

NAAC

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 52.58

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

2018-19	2017-18	2016-17	2015-16	2014-15
1583	1979	2141	2129	1048

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document
Any additional information	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 0.71

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
109	0	0	0	0

File Description	Document
Any additional information	View Document

5.1.3 Number of capability enhancement and development schemes –

1. For competitive examinations
2. Career counselling
3. Soft skill development
4. Remedial coaching
5. Language lab
6. Bridge courses
7. Yoga and meditation
8. Personal Counselling

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 64.54

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

2018-19	2017-18	2016-17	2015-16	2014-15
2032	2287	2372	2266	1881

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years**Response:** 55.68

5.1.5.1 Number of students attending VET year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2368	2465	1541	1612	1310

File Description**Document**

Details of the students benefited by VET

[View Document](#)

Any additional information

[View Document](#)**5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases****Response:** Yes**File Description****Document**

Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee

[View Document](#)

Details of student grievances including sexual harassment and ragging cases

[View Document](#)

Any additional information

[View Document](#)**5.2 Student Progression****5.2.1 Average percentage of placement of outgoing students during the last five years****Response:** 66.36

5.2.1.1 Number of outgoing students placed year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
573	739	688	683	400

File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document
Any additional information	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 1.81

5.2.2.1 Number of outgoing students progressing to higher education

Response: 18

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document
Any additional information	View Document

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 23.71

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	0	0	1

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
33	16	3	3	1

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

5.3 Student Participation and Activities

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

Response: 40

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

2018-19	2017-18	2016-17	2015-16	2014-15
15	11	7	6	1

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

Academic Roles:

Class Committee: To improve the teaching-learning processes class committee is formed comprising the student members apart from the office bearers from the Faculty. The committee hold meetings 3-4 times a semester to discuss the teaching learning processes and other academic and non-academic issues. During such meetings student's members are free to express their opinions, difficulties faced, if any and also suggestions to improve the overall ambience of learning.

Alumni committee:

Alumni are elected as Executive members of this committee to be a part of the running of the Alumni association. They do take active part along with the Faculty office bearers of the Alumni association in conducting the meetings every year.

Alumni were invited for Lecture in the campus to make the students aware of the latest trends and also to guide them in their career.

Administrative roles:

Anti-Ragging Committee: Students representatives were formed to look into ragging problems, if any, and confidential reporting to the committee coordinators

Women Empowerment Cell: Girl students do participate in various programs organised by the Institution towards women empowerment so that these students will be aware of societal issues that are prevalent on the day and also learning about various empowerment strategies.

A committee constituted by HOI is looking after Alumni activity such as maintaining database for Alumni, Students interaction Program, Arranging Alumni Lectures etc.,

Professional Societies:

The institute has several professional societies under various departments and students are members of such society and do involve themselves in the administration of such committee.

(i) ICI student chapter: This committee functions under the department of civil Engineering. (ii) Computer

Society of India (CSI): This committee functions under the department of Computer Science Engineering.

The roles and responsibilities of the student office bearers of ICI student chapter and CSI are as given below:

President:

1. Become informed of the current affairs and activities of the chapter and become involved in these activities as requested by the Executive Committee.
2. Perform various functions as requested by the President.
3. Submit a report of activities and recommendations to the President for each Executive Committee meeting.

Vice President

1. Serve as advisor to the President and the Executive Committee.

Secretary/Treasurer

1. Serve as a member of the Chapter Executive Committee.
2. Keep records of the meetings of the Executive Committee.
3. Handle correspondence when feasible and appropriate, including meeting notices for members.
4. Write official correspondence as directed by the President.

Joint Secretary/Joint Treasurer

1. Assist the Chapter Faculty Advisor and officers in development and administration of the annual chapter budget.
2. Maintain financial records of the chapter.
3. Receive and disburse chapter funds.
4. Send annual plan and annual report to CSI Headquarters including chapter calendar of events, names and addresses of officers, and any other information considered relevant to representing the success of the chapter in serving its membership and purposes.

Training and Placement Cell: The students are acting as volunteers to assist successful training and placement activities.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 10.4

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
15	12	10	11	4

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions organised per year	View Document
Any additional information	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

The Alumni provide a strong support to our institution. S.A Alumni Association was formally inaugurated in the year of 2008 which had its first batch with an intention to bridge the gap between Alumni and the institution for the mutual benefit. Alumni Association is administered by an Alumni Committee. The alumni association is very active in promoting interactions and camaraderie among the alumni, staff and the management. Besides helping the alumni in all possible ways, it also lends its support to the college to achieve its cherished goals, its vision and mission.

Alumni association of the Department has been playing a vital role in developing the student's knowledge. Alumni are elected as Executive members of this committee to be a part of the running of the Alumni association. They do take active part along with the Faculty office bearers of the Alumni association in conducting the meetings every year.

An interaction program between the alumni and the students is being conducted every year on January 26. During this program career guidance towards the employability of students are discussed. Apart from

Various technical skills desired by the employer at different domains, are also discussed for the benefit of the students. The profile of the company in which the alumni's working is also well discussed for helping the students.

Alumni contribute to our institution in many ways. They are invited to offer guest lecture, career guidance and counselling to our students so that students are motivated and also exposed to current trends in various fields of Engineering and management. Alumni are invited to our campus to act as Judges for the technical symposiums conducted in our college. They also do take part in tree plantation activities. Alumni also post their testimonials as to how successful they are in their career which indirectly stimulate our students to emulate them. Alumni also help out the students in getting placements also. They do post information about the HR requirements in organisations in the Alumni needs column and this opens the door for the students in their final year to secure placements. In recognition of meritorious services of our alumni the Institution selects such alumni and awards them with 'distinguished Alumni award'.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5.4.2 Alumni contribution during the last five years(INR in Lakhs)

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: ? 5 Lakhs

File Description	Document
Any additional information	View Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 52

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
11	11	8	11	11

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years	View Document
Any additional information	View Document
Report of the event	View Document

NAAC

Criterion 6 - 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

Response:

Nature of Governance:

Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan

- Organizing value added courses
- Encouraging research.

• Interaction with stakeholders

- Parent's meeting
- Management and Principal meet students, obtain their feedback and initiate necessary improvement measures.

• Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders

- Consult and feedback collected from stakeholders policy and plan are upgraded regular.

• Reinforcing the culture of excellence

Participatory Leadership is ensured at every level to promote the culture of excellence.

Faculty Development Programs are organized with the guidance of the Principal, to keep the faculty abreast of the recent trends in teaching, learning & evaluation, and their specialized area of interest, thereby reinforcing a culture of excellence.

As an institution moving towards paperless governance, most of the communications are sent to the Departments and Centers as soft copies through e-circular.

Perspective plans:

The management plans the expansion and up gradation of infrastructure, modernization of existing facilities, research and development and introduction of new courses. The Principal and Heads of the Departments plans the academic activities, consultancy, MoUs, Innovations in teaching and learning process etc. and with approval of Management, it will be effectively implemented.

Participation of the teachers:

The Management at the highest level is in constant touch with the head of the institution and gives enlightened leadership to the Principal for the smooth functioning of the college.

- o Director
- o Principal
- o HOD
- o Committee Coordinator
- o Members of Various Committees
- o Internal Auditors for QMS
- o Program Organizer – Event coordinator

At Student Level:

- Selection of class pupil leader
- As class committee members
- Organizers of student centric college events like conferences, Tech. fests, cultural, sports etc.
- Organizers of community services through NSS, YRC, etc

At Faculty level:

- Organizing industrial visits and workshops, conferences.
- As mentors and class advisors.
- Planning and execution of several department activities, budget, purchase etc
- Organizing College Day, Graduation Day, Sports Day and other functions

As Head of the Department:

- Planning , execution and monitoring the performance of the department
- Heading the activities of administration and academics of the department and other committees

mentioned earlier.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.1.2 The institution practices decentralization and participative management

Response:

The institution believes in promoting a culture of decentralized governance system :

The department decides on timetable, subject allocation, purchase of equipment and consumables, budgeted allocation, organizing guest lectures and workshops, recommends necessary industrial visits, implant trainings, MOUs and work to achieve its goals, vision and mission.

All academic and administrative activities are decentralized and management decisions are taken based on discussion and deliberations in class committee meetings, department meetings, monthly faculty meetings and HODs meeting with principal and director. Finally the Principal coordinates between departments, administration and management. Minutes of these meetings are available.

Participative management:

Yes, the College promotes culture of participative management which enables staff and students to voice their opinions and suggestions which are considered for improvement.

This system of communicative management gives freedom to express their opinions for improvement and address their requirements. Participative management allows collaboration between departments and thereby improves the quality of management.

- The various committees are formed to frame the guidelines, to take part in monitoring and controlling the entire processes of Academic, Finance, Research and Students welfare and Academic Evaluation which is a evidence of decentralization.

The following committees are formed:

1. Internal Quality Assurance Cell
2. Planning & Monitoring Committee
3. Academic Excellence committee
4. Research and Development Committee
5. Discipline committee
6. Alumni Committee
7. Professional Societies and Women Empowerment
8. Placement and Training Committee
9. Resource Management and Budget committee
10. Anti-Ragging and Social Service Committee
11. Grievance Redressal Committee
12. Internal Compliance Committee

All the above committees are supervised by a coordinator with a committee member from each department which enables smooth functioning of the committee without any flaws.

In addition to the above, various Stand-alone committees are also formed to administer the following: Library, Sports, Transport, Hostels, Office Administration and Health Care centre.

Students also actively participate in NSS activities under the guidance of the Faculty which shows participative management in all aspects.

Head of the Departments monitor the execution of academic, research, student activities, placement, and discipline in their respective departments. Assistant Head of the Department, Section Coordinators, Class advisors and Faculty advisors work as a team for the smooth functioning of the departments.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

Research and Development

Faculty with PG degree are encouraged to register and pursue their doctorates.

The cell motivates all faculty members of SAEC to submit proposals to various funding agencies to carry out research projects and to organize sponsored events like seminar, Workshops , Conferences etc.

1. Initiation taken to promote interdisciplinary projects .
2. Support towards collaborative research
3. Promotes research by motivating the ideas/innovation of faculty and students through filing of patent and subsequent publication of the same.
4. The centre not only focuses on research in core department but also on Science and Humanities. In continuation with this, Anna university research centre for the department of Mathematics was filed.

Quality publications is another way of evaluating the research atmosphere in an institution. Hence, the cell appreciates and insist the student and faculty for publication of their research findings in reputed conferences and journals.

Curriculum Development:

S.A.Engineering College is affiliated to Anna University; henceforth the syllabus framed by Anna University is followed. Changes in the syllabus are incorporated in different regulations of the syllabus framed.

Teaching and Learning Academic Excellence Committee monitors the effectiveness of teaching and learning methods followed in the college. Academic schedule is framed by the committee and it is approved by the Principal. All academics follow up the academic schedule. Teaching pedagogy methods that is to be followed by each course is decided by the course coordinators and the same is incorporated. Pedagogy methods include PowerPoint presentations, 3D presentation, Nptel videos, Lab based teaching, Google classroom, Usage of ICT tools, Mini projects etc,. In addition to the above Guest Lectures, Industrial visits are arranged to impart the industry standards to students. Class committee meetings are conducted thrice in a semester before the Internal assessments. Any grievances and difficulties reported are sorted out immediately so as to ensure the correctiveness of teaching & learning methodologies. NSLB students are monitored affectively by conducting special classes.

Examination and Evaluation

- Exam cell wing headed by the Exam cell coordinator ensures the conduction of tests as scheduled in the academic calendar without any flaws.
- Checking the quality of question papers and answer book evaluation by subject experts in all departments
- Allocation of invigilation duties in a centralized manner
- Answer book evaluation is done by the concerned in charge, followed by answer book evaluation by subject experts.
- Mark entry in Palpap software without any deviations.
- Results are analyzed for all the Internal and University exams. Follow up actions for subjects with

low pass percentage and the reason for the low results are recorded in MMFO5j

- Based on this internal marks are calculated band entered in the Anna University web portal.
- University results are analysed after the publication of University results.

Human Resource Management

Human Resources aims at quality improvement of the faculty. Training On duty of 7 days is availed by faculty to attend FDPs, Conferences, Seminars, Workshops etc. Faculty are encouraged to take up Nptel courses, Nptel Registration fee is reimbursed by the management on successful completion of the course.

File Description	Document
Any additional information	View Document
Strategic Plan and deployment documents on the website	View Document
Link for Additional Information	View Document

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

The management and head of the institution are always in interactive mode with each other.. The Management, Principal and faculty work in conjunction to formulate and implement its quality policy and plans. The Principal is the academic and administrative head of the institution. The head of institution get the feedback from teachers, students and the alumni with regards to the teaching quality, curriculum, extracurricular activities and infrastructural demands. In the meeting of the Management Committee the information gathered from different sources are discussed with the participating members. After thorough discussion and deliberation the existing facilities and activities of the institution are reviewed and decisions are taken for their implementation after going through the available resources and modalities. The faculty participates actively in policy making and application through various committees. These committees meet prior to the management meeting, discuss various matters and present their reports and recommendations to the Head of the institution. During the Management meeting, the Principal`s report is reviewed by the members of the Managing Committee. A thorough discussion ensues, valuable suggestions offered and final resolutions are taken for implementation for the growth of the college.

Actions taken on recommendations from the previous meeting are also reviewed to monitor the progress and take necessary action. The head of the institution communicates the policy decisions to the faculty in the staff meetings.

Principal

Looks after all the Administrative and Academic activities falling in line with the AICTE, Anna University and the Government of Tamil Nadu norms, in all aspects. Conducts all the UG, PG and Ph.D programmes according to the affiliating university (Anna University) guidelines and is not supposed to conduct any programmes apart from the programmes affiliated by the University. Appoints Faculty Member according to the norms of the AICTE and affiliating university (Anna University). Acts as Warden for Gents Hostel. Monitors admission, conducts regular class works, to organize placement activities in coordination with Placement Director., create an environment for industry institute interaction, coordinate R&D activities, coordinate staff and external organization for R&D and consultancy, maintain discipline among students and staff. Monitors smooth conduct of Quality Management System in accordance with NBA and NAAC.

Head Of the Department (HOD)

Responsible for all the academic affairs of the Department. Looks after day to day activities relating to teaching and other workloads of his/her teaching and non-teaching staff. Reports to the Principal regarding all the requirements of his/her department such as Faculty Member, supporting staff, equipments, books & journals, maintenance etc. Represents his/her department and will report to the Principal all the requirements/short comings for the development and proper functioning of the Department, during weekly/fortnightly meetings. Looks after the matter related to R & D, Consultancy and Research Publications. Arranges for Guest Lecture/Extension Lectures, Seminars, Workshops, and Conferences etc. Responsible for mobilizing his/her Faculty Member for different research grants. Responsible for innovative programmes including collaboration with other institutions, Universities and different industries. Responsible for students proctor's system.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.2.3 Implementation of e-governance in areas of operation

1. Planning and Development
2. Administration
3. Finance and Accounts
4. Student Admission and Support
5. Examination

- A. All 5 of the above
- B. Any 4 of the above
- C. Any 3 of the above
- D. Any 2 of the above

Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP Document	View Document
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	View Document
Any additional information	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

The various committees are formed to frame the guidelines, to take part in monitoring and controlling the entire processes of Academic, Finance, Research and Students welfare and Academic Evaluation which is a evidence of decentralization

The following committees are formed:

- 1.Internal Quality Assurance Cell
- 2.Planning & Monitoring Committee
- 3.Academic Excellence committee
- 4.Research and Development Committee
- 5.Discipline committee
- 6.Alumni Committee
- 7.Professional Societies and Women Empowerment
- 8.Placement and Training Committee
- 9.Resource Management and Budget committee
- 10.Anti-Ragging and Social Service Committee
- 11.Grievance Redressal Committee

12. Internal Compliance Committee

All the above committees are supervised by a coordinator with a committee member from each department which enables smooth functioning of the committee without any flaws.

In addition to the above, various Stand-alone committees are also formed to administer the following: Library, Sports, Transport, Hostels, Office Administration and Health Care centre.

Students also actively participate in NSS activities under the guidance of the Faculty which shows participative management in all aspects.

Head of the Departments monitor the execution of academic, research, student activities, placement, and discipline in their respective departments. Assistant Head of the Department, Section Coordinators, Class advisors and Faculty advisors work as a team for the smooth functioning of the departments.

PROFESSIONAL SOCIETIES AND WOMEN EMPOWERMENT

Our institution also a part of student chapters. At present all the students and staff are members of any one of the professional society.

Student chapters like ISTE, IEEE, IETE, CSI, ACM, SAE, MMA, CII, FICCI, NIPM, IAENG are functioning.

Many events like Workshop, Guest lectures, Seminars are organized by this centre.

For the Academic year 2014-15, nearly 20 activities have been organized by all departments.

Also For the Academic year 2015-16, nearly 27 activities have been organized by all departments.

Also For the Academic year 2016-17, nearly 34 activities have been organized by all departments.

Also For the Academic year 2017-18, nearly 35 activities have been organized by all departments.

Also For the Academic year 2018-19, nearly 36 activities have been organized by all departments.

The professional activities are increasing for all the years which give a great power to this cell.

WOMEN EMPOWERMENT CELL

Also we have a powerful women empowerment cell in which various women related programmes and activities have been organized.

For the academic year 2014-15 activities are as follows.

1. General Wellbeing of Women.
2. Cancer Awareness program for women.
3. International Women's day Celebration.

4. Awareness program for women

For the academic year 2015-16 activities are as follows.

1. Self Defence programme for strong women and strong mind Karate.
2. Additional Karate Classes-Hostel Girls.
3. International Women's Day Programme "sakthi"
4. Rice Fist event

For the academic year 2016-17 activities are as follows.

1. Rexona Confidence academy-Teaching the importance of grooming & confidence
2. Yoga for women Workshop
3. Self Defence
4. Workshop on Alleviation of Harassment through Social Media

For the academic year 2017-18 activities are as follows.

1. Her Health & Hygiene
2. Awareness Program on Legal Rights for Women
3. International Women's day Sakthi-18

For the academic year 2018-19 activities are as follows.

1. Social media awareness
2. Her health & hygiene
3. International women's day programme

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.3 Faculty Empowerment Strategies

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

Response:

The supportive management is fully aware of the fact that updating of knowledge base and skills is not only desirable but also imperative to face the challenges of this constantly evolving world. The institution ensures the professional development of the staff by

- Planning and executing programmes that address professional development, Career development, personal development of faculty members
- Encouraging faculty members to enroll for or provide resources for training programmes and workshops.
- Appreciating innovations and recognizing and awarding performance Sponsoring for participation in national and International Conferences, seminars, workshops and Publications.
- Supporting membership and active involvement in local, state, national and International-professional associations.
- Our faculty members are active life members of various national and International professional bodies.
- Providing access to the Internet, audio-visual aids, software packages etc., as required.
- Facilitating institutional infrastructure, learning resources for effective curricular transaction.

Development programmes for Non-teaching staff:

The college has implemented various programmes to enable the staff to function more effectively. Employees need training in advanced skills related to their works. In this regard college provided computer training to the staff. Institution appointed supporting staff to carry out the activities of the college as well as the computer training programmes and other service programmes conducted by the University.

Realizing that satisfied employee is an asset for the institution and can make the college a productive place, the management has put several incentive measures in place for the teaching as well as Non-Teaching Staff them besides the salary package.

General amenities:

- Teaching and non teaching faculty can avail free transport facility.
- Medical facility.

Incentives / Awards:

Financial assistance of Rs.5000 is provided on Annual Day to the faculties who have secured 100% university result in their respective subject.

Facilities provided for Faculty career development:

- Sabbatical leave (OD) for attending examination, FDP, National & International Conferences.
- Registration fee reimbursement for FDP/ Conferences.

List of major Welfare facilities given to the Faculty :

- Provident Fund contribution is available to the staff members.
- Every year Monthly & Daily Sheet Calendar is given to all faculty members.
- On any medical need, hospital facility is arranged.
- Monthly one Casual Leave and two one hour permission is allowed to avail.

- CPL is given to Staff Members for carrying out the assigned works during Holidays
- Yearly 28 days of Vacation leave (winter-7 & summer -21) is given to faculty members.
- Yoga facilities are available.
- Sports (indoor game, outdoor games) are conducted Staff members.

- Medical leave are given to the employees during his/her job period.
- There is a provision of maternity leave for the staff.
- Safety insurance to all.

Fee concession to the wards of faculties in college and school

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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

Response: 30.33

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

2018-19	2017-18	2016-17	2015-16	2014-15
82	111	79	63	35

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc during the last five years	View Document
Any additional information	View Document

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 28.2

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
31	35	32	23	20

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Reports of Academic Staff College or similar centers	View Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 78.18

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
187	187	219	211	147

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers).	View Document
IQAC report summary	View Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	View Document

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

The achievements of faculty members are monitored and maintained through Performance appraisal system as per the guidelines from the management.

Ø The traits of the Performance Appraisal System are class room delivery effectiveness , lesson plan/session plan/lecture notes preparation/execution, teaching methodology(initiatives), Academic planning & execution ,Assessment & enhancement of student learning, Class room management , Initiative/ commitment/leadership, Academic results .

Ø Additional academic activities, syllabus enrichment, participatory and innovative teaching learning methodology, and examination activities are assessed under this heading. Extracurricular and Co-curricular. Faculty contributions to student-related, field-based extracurricular and co-curricular activities covering socio-culture and other administrative activities are assessed. Research and Academic Contributions. Publication in journals, participation in conferences, seminars and workshops, faculty development programs, consulting, and projects are assessed under this head.

Ø The appraisal report of faculty is made by the concerned head of the department on the basis of yearly achievements, discipline, quality etc. and then submitted to the Head of the Institute. HOI is doing appraisal for Head of the Department.

Ø All the students from each and every class fill this form to help the institution assess the teacher performance and take necessary measures. The identities of students are not revealed.

Ø The Principal analyzes the student's reflections and shares it individually with the staff to help them judge their performance and overcome the difficulties. Counseling is provided to staff in order to help them improve their professional capabilities.

Ø The Principal evaluates the report and submit the report to the management.

The performance appraisal report duly filled and assessed by the Principal and management. The Management plays an active role in the performance appraisal of the staff. Annual increments and promotion in the grades are all implemented under the signatures of the managing committee. Recognition and increments are given to the professors who have completed their Ph.D. Likewise, the management ensures expeditious implementation of all the benefits after the appraisal of the faculty. The management takes effective decisions and the decisions taken are incorporated in the proceedings of the meetings of the managing committee and Governing Body.

File Description	Document
Any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Yes, Internal and External financial audits are conducted. Audit statements are updated in the college website duly signed by Chairman and Auditor.

The institution's financial resources are managed using various effective and efficient measures. The college has a fully computerized accounts department who makes sure that all the transactions are made via bank (Cheques & DD) and is supported through cheques and only duly authorized personnel can operate through the bank.

There is an efficient budget committee and purchase committee operating in the college who help in proper and efficient allocation and optimum usage of available funds.

There is a two tier checking process, internal audit and external audit, to check and follow up on the utilization of financial resources –

We have budgetary provisions for all administrative and academic activities.

MONITORING FINANCIAL MANAGEMENT PRACTICES THROUGH INTERNAL AUDIT, FINANCIAL PLANNING, BUDGET ALLOCATION, AUDITING

Financial planning is done at the start of each financial year. Budget planning is based on:

Previous year's income-expenditure details

Anticipated expenditure for the coming financial year.

Early phase **tax planning** helps the institute to be up to date and on time with respect to tax payment.

All financial matters such as fee collection, salary distribution, tax payment etc are taken care of by the finance department.

Record of every transaction is maintained in the form of authentic receipts.

Accounting system is computerized for all financial transactions.

Budget allocation is based on requirements for different sections/departments.

Budgetary provisions are proportionally utilized for administrative and academic activities in order to ensure maintenance and expansion of SAEC

We have a Centralized **Purchase Committee** of SAEC. All material requirements of our institute including stationery for the new academic year are calculated at the end of previous academic year. Material planning is done on the basis of earlier year's consumption and incoming year's expected student

strength. Requisition is placed to the Purchase Committee for all requirements. The Committee prepares their financial planning based on requisition received from various departments. The requirements are supplied in an organized and professional manner.

Emergency requirement is met with at local level.

If a condition so arises that the available budget is inadequate, then the Institute can meet with the deficit by taking aid from Trust.

In order to ensure reliability in terms of budget details and to avoid any form of discrepancy, **regular auditing** is done during which the planned budgetary details are compared with the factual data (fee receipts, bank statements, purchase & service bills etc).

v **Internal auditing** is done on a regular basis by Messrs. L.U. Krishnan & Co., our internal auditor.

REGULARITY IN EXTERNAL AUDIT

v **External/Statutory auditing** is done at the end of each financial year by our External Auditor Messrs. T.M. Jayachandran & Co.

All relevant data relating to financial matters as discussed above are organized and retained in a computerized system. This helps to computerize the entire **Financial Management System**.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

Response: 85.09

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
17.36	9.49	21.59	25.38	11.27

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	View Document
Any additional information	View Document
Annual statements of accounts	View Document

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

Response:

Budgetary provisions are made use of for administrative and academic activities. Academic activities are given an equal weightage considering that all our courses are self-financing and hence self maintained

Budgetary provisions are utilized for:

- Ø Infrastructure maintenance and development
- Ø upgrading the existing institutional system
- Ø Augmentation of library and laboratories.
- Ø Introduction of new and relevant technology
- Ø Improving the basic facilities provided to students and teachers
- Ø Salary for staff
- Ø Providing financial aid to needy students and staff
- Ø Staff welfare measures
- Ø Gym and other student's facilities
- Ø To be prepared for unexpected and emergency situations
- Ø Social activities and society welfare

Most importantly budgetary provisions are utilized for the expansion of SAEC in terms of both quality and quantity.

INSTITUTIONAL INITIATIVES FOR MOBILIZATION OF RESOURCES

The source of income for the institute is:

- Fees obtained from students of all courses.

If a condition so arises that the available budget is inadequate, then the **Institution can meet with the deficit by taking aid from Trust.**

Institute is also getting grants from various Government bodies like

- AICTE
- TNSCST
- CVDRE
- DRDO
- DST
- BRNS
- SERB
- ISRO

etc., and the grants are utilized to meet recurring and non recurring cost. And also grants are received from Non Government bodies i.e CST , IEEE ,ISTE ,SAE ,IETE etc., for institutional activities.

Knowledge is generated and applied in new innovations and technologies which in turn shall be utilized to enhance the quality of socio-economic and environmental conditions of society. The institute is committed to provide excellence in research. The professors from various department and the faculty members take a great effort in securing grants for Research work using their stupendous knowledge and experience in Research work and the fund thus secured is only utilized for R& D purpose. The institute has executed many major Research and Development projects. Donations from government and non government bodies, institutions are used for R&D.

The institute conducts the seminars, conferences and Faculty development programme and other co-curricular activities regularly and matching with the latest technology, innovations, research, changes and needs for the society.

Modern sports complex has been created to provide ample opportunities to conduct sports and enable student participation.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

1. Quality Management Systems:

Course Outcome-Programme Outcome attainment

PEO attainment

Internal Audit

Corrective Action Reports(CAR)implementation based on the Audit.

PAC and DAC committees

Department Advisory Committee (DAC) comprises of Management representative, stakeholders ,Academician from affiliating University and Industrialist.

Programme Assessment Committee (PAC) comprises of Programme Coordinators, NBA Criteria coordinators and this committee is headed by HoD.

Programme Assessment Committee (PAC) and Department Advisory Committee (DAC) discusses on imparting quality education to students. All changes incorporated are approved in DAC meetings. Assesment methods of PEOs&POs are discussed and approved in PAC &DAC meeting. Attainment methods are also discussed.

Mentoring system

- The faculty advisors play the role of Mentors.
- Number of faculty mentors: 3 per class
- Students are allocated for each faculty advisors (Mentors)
- Number of students per mentor: ±20
- Frequency of meeting: 15 days once

Counselling the student for course work & labarotory specific based on

- Punctuality/Class Room Attentiveness,
- Attendance,
- University Exam Arrears,
- Internal Assessment Test Arrears,
- Dress Code,
- Cleanliness& Obedience,
- Motivation towards Higher Studies/Entrepreneur/Placement,
- Co-curricular activities,
- University Rank,
- Sports Activities.
- Students are continuously counseled by the mentors in all the above aspects
- These students are counseled by the faculty during the Library/counseling hour and improvement is

also recorded in Mentoring efficacy at the end of each semester.

- Student with <75% attendance more than 3 arrears and disobeying are taken to HOD.
- Personal counseling is given to the student if required parental counseling is also given by the HOD.
- Some extreme cases with Aggressive behavior/ Personal issues /Health issues are recommended for Professional counseling.
- If no improvement is found even in professional counseling then the student is forwarded to the Principal for further action.

Proctor card maintenance

- FA should maintain the student record from 3st sem to 8th sem.
- The students personal detail along with their academic performance and progress is updated in 'Student Record' maintained by the mentor.
- The counselor whose primary activity is to monitor the academic progress of the students under their care and to take corrective measures for any aberration in their progress in academic pursuits.
- Proctor card is also submitted to the HOD with Mentoring efficacy each sem.

Daily attendance monitoring

- Daily attendance monitoring is the daily activity of the mentor. If prior intimation for leave was given through phone or with a Leave form, the student's absence is recorded in Daily attendance register with reason and frequency of absence is also marked.
- If no prior intimation, then mentors call their parents to inform about their absence and to know the reason for the same.
- Next day they enquire about their leave and get the leave letter with parent signature.
- The overall attendance report is analyzed & discussed with HOD, FAs and CAs for reason.
- If the reason for their absence is valid, then with medical certificate student forwarded to the principal.
- The Attendance is also boosted for those students after confirmation from principal.
- Consolidation attendance report displayed in Notice board for all the student.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

Example 1: Academic Excellence Committee

1. IQAC is constantly evaluating teaching learning process through feedback.
2. Academic Calendar is scheduled by AEC coordinator with the approval of Principal and Director
3. Before the start of semester AEC monitors the following

- Subject Allocation as per the norms
- Preparation of Timetable and entering palpap software
- Any changes incurred in COs are to be approved in the PAC and DAC meetings of the department.
- Submission of Lecture notes, Question Banks, Lab manuals and check by inter departmental members. Check list is finally submitted to AEC coordinator. IQAC ensures the quality of teaching by the submission of the above by faculty.
- Teaching Pedagogy methods to be submitted by the course coordinators after discussions with the co subject Incharges and the same is ensured at the end of semester.
- AEC tries to impart quality teaching and learning methodologies by arranging NSLB classes to upgrade the student learning
- At the end of semester, Model Lab conduction is monitored by inter department members.
- All remedial classes are decided and informed to the departments through AEC.

Example 2 : Academic Monitoring & Measurement

1. Exam cell wing headed by the Exam cell coordinator ensures the conduction of tests as scheduled in the academic calendar without any flaws.
2. Checking the quality of question papers and answer book evaluation by subject experts in all departments.
3. Allocation of invigilation duties in a centralized manner.
4. Answer book evaluation is done by the concerned in charge, followed by answer book evaluation by subject experts.
5. Mark entry in Palpap software without any deviations.
6. Results are analyzed for all the Internal and University exams. Follow up actions for subjects with low pass percentage and the reason for the low results are recorded in MMFO5J
7. Based on this internal marks are calculated band entered in the Anna University web portal.
8. University results are analysed after the publication of University results.

In addition to the above ,the following are also integrated to enhance the student skills,

1. Strengthening the campus placements process to provide job opportunities for the Students
2. Strengthen the Environmental Projects for Green Campus.
3. Value Addition Programmes / career oriented technical training programmes for students to improve their technical acquaintance.
4. Management supports for Research Projects and encouraging research collaborations. On timely basis upgradation of Lab Equipment's to meet with the advanced technology across the departments
5. Encouraging Students for Industrial Visits to understand and to gain the knowledge of new

concepts.8. Orientation programmes are conducted for Teaching and Non Teaching Staff Members. Staff and Students are Encouraged to apply their innovative projects to get funding from various Granting Agencies

6. Supplementary encouragement is given to Students to participate in different events like Sports / NSS / CSR activities
7. Regular interaction with class representatives and class advisors of each and every department for maintaining and sustaining quality education as directed by IQAC.
8. University Rank Holders were felicitated with cash awards and mementoes
9. Co-ordinated online Examination conducted by Government of India.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 28.2

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
31	35	32	23	20

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
Any additional information	View Document
IQAC link	View Document

6.5.4 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
2. Academic Administrative Audit (AAA) and initiation of follow up action
3. Participation in NIRF
4. ISO Certification

5.NBA or any other quality audit**A. Any 4 of the above****B. Any 3 of the above****C. Any 2 of the above****D. Any 1 of the above****Response:** A. Any 4 of the above

File Description	Document
e-copies of the accreditations and certifications	View Document
Details of Quality assurance initiatives of the institution	View Document
Any additional information	View Document
Annual reports of institution	View Document

6.5.5 Incremental improvements made during the preceding five years (in case of first cycle) Post accreditation quality initiatives (second and subsequent cycles)**Response:**

Our college has shown the following quality initiatives from 2014 to 2019

- **Thiru D. Dasarathan, Secretary**, S.A. Engineering College received the “**Best Edupreneur Award**” for Two consecutive Years from his excellence, Honorable Governor of Tamil Nadu Dr. K. Rosaiah, conducted by "Times of India"
- **AICTE / CII Survey has placed SAEC under PLATINUM CATEGORY**– As one of the Best Industry Linked Computer/ IT, Electronics Engineering & Allied Engineering Institute.
- **SAEC Ranked 77 th** Among Overall Private Engineering Colleges and Ranked 55th among Private Engineering Colleges in South Zone(Source – “THE WEEK”)

2014-15

1. **Department of Mechanical &EEE have been accredited from 1st July 2014 with a Validity of 2 years**
2. **Centre for Innovation Promotion and Entrepreneurship Development (CIPED) cell** was inaugurated .
3. 20 Faculty Development Programmes were organized
4. 147 faculty attended training Programmes
5. 15 MOUs with ongoing activities
6. 10 (UG- 3& PG-7) University ranks were secured by our students

7. **Engineering College of the year 2013-14** Awarded by Silicon India
8. **Best B-School** in Business India Survey 2013

2015-16

1. 16 (UG- 2 & PG-14) University ranks were secured by our students
2. 23 Faculty Development Programmes were organized
3. 211 faculty attended training Programmes
4. NSLB classes were followed to improve the learning skills
5. **Best Accredited Student Branch Award by Computer Society of India for consecutive three years for 2015-16.**
6. **Best Engineering College with Excellent Faculty Award** by WWA, Asian education summit ,2016,New Delhi
7. 6th Position with A++ Grade by Chronicle Engineering Survey 2016.
8. **Best Colleges Award-77th Position THE WEEK HANSA**
9. **Best Colleges Award-34th Position HIGHER EDUCATION REVIEW**
10. **High Quality Placements Survey- 20th Position HIGHER EDUCATION REVIEW**
11. **Best Colleges Award-15th Position CSR**
12. 19 MOUs with ongoing activities

2016-17

1. **17 (UG- 1& PG-16) University ranks were secured by our students**
2. 32 Faculty Development Programmes were organized
3. 219 faculty attended training programmes
4. Worldwide Achievers Foundation identified S.A Engineering College with Excellent faculty and awarded the institution as the **“Best Engineering College in Tamil Nadu”- Asian Education Summit 2016, New Delhi**
5. **Best Accredited Student Branch Award by Computer Society of India for consecutive three years for 2016-17**
6. **6th Position with A+ + Grade by Chronicle Engineering Survey 2016**
7. Worldwide Achievers Foundation identified S.A Engineering College with Excellent faculty and awarded the institution as the **“Best Engineering College in Tamil Nadu”- Asian Education Summit 2016, New Delhi**
8. Best Colleges Award-43rd Position (south zone) by **THE WEEK HANSA**
9. Best Colleges Award-66th Position (India)by **THE WEEK HANSA**
10. Best Colleges Award-2nd Position (Chennai) by **TIMES OF INDIA**
11. Best Colleges Award-4th Position (Tamil Nadu) **TIMES OF INDIA**
12. Best Colleges Award-54th Position by CSR
13. Best Private Engineering College in South India 2017 by MHRD
14. **BEST ENGINEERING COLLEGE FOR THE YEAR 2017 -43rd position** by OUTLOOK
15. 10 MOUs with ongoing activities

2017-18

1. **Mechanical and EEE departments have been accredited from 2017-18 to 2019-20 Upto 30-06-2020**
2. SAC Spark Automation Centre was established with in the college campus to promote skill

enhancement for students

3. NSLB classes were followed to improve the learning skills
4. 39 (UG- 10 & PG-29) University ranks were secured by our students
5. 35 Faculty Development Programmes were organized
6. 187 faculty attended training programmes
7. **Best Accredited Student Branch Award by Computer Society of India for consecutive three years for 2017-18.**
8. Department of Mathematics was recognized as Research Centre by Anna University Best Colleges Award-86th Position (India) THE WEEK HANSA 2017-18
9. Best Colleges Award-8th Position (Tamil Nadu) TIMES OF INDIA 2017-18
10. Best Colleges Award-1st Position (AU Affiliated Non- Autonomous Institution) TIMES OF INDIA 2017-18
11. A position -Top 100 Institutions in India INDIA TODAY 2017-18
12. 15 MOUs with ongoing activities

2018-19

1. **S.A E.C was awarded with ISO 9001:2015 standards based on the external audit in June 2018**
2. Steps to secure autonomous status for the college and visit by the affiliating Anna University in March 2018 , and followed by NBA audit during February 2019.
3. **ECE, CSE & IT departments have been accredited from 2019-20 to 2021-22 with a Validity till 30.6.2022.**
4. 95% of the faculty have attended Nptel examinations and successfully cleared the courses
5. **CUB- Centre for Unique Product Development was inaugurated**
6. **LATERN – Innovative Engineering Private Ltd., a company owned by Mr.Karthick Chandrasekhar, an alumni of SAEC (Mechanical Engineering Department, 2014 Passed out Batch) was a incubatee of CIPED cell of our college and now has exited the cell as a successful entrepreneur.**
7. 31 Faculty Development Programmes were organized
8. 187 faculty attended training programmes
9. 3 (UG- 1& PG-2) University ranks were secured by our students
10. **BEST ENGINEERING COLLEGE FOR THE YEAR 2018 -89th position**
OUTLOOK 2018-19
11. Best Colleges Award-17th Position (Tamil Nadu) TIMES OF INDIA 2018-19
12. Best Colleges Award-12th Position (Chennai) TIMES OF INDIA 2018-19
13. **A+ in Grade-wise Listing, 39 in Top 75 Engg. Colleges and 32 in Zone-wise Listing** CIVIL SERVICES CHRONICLE 2018-19
14. 28th position in Outstanding Engg. Colleges Excellence CSR
15. Certificate of Appreciation Mindmap Enterprises Private Ltd
16. **Best Student branch Award from IEEE**
17. Five years of Active Participation in CISCO Networking Academy
18. 7 MOUs with ongoing activities

2019-20

1. **Autonomous visit by UGC Peer committee during August 2019**
2. Formation of **MHRD-Institute Innovation Council** headed by Dr.S.Baskar ,Professor ,Mechanical department

3. **Virtual lab in association with Amritha labs was set up in our campus and was awarded First rank for clinching Top Performig Nodal Center in the month of July 2019, 2nd place in August and 4rth place in September**

4. Inauguration of Citizen Consumer club

5. Inauguration of IEI-SAEC Student Chapter organized by Mechanical Department.

6.4 Patents were granted at the mechanical department with the following title

- Dr.P.Sevvel-Food storage container- 17.05.2019
- Dr.R.Senthil Kumar & Dr.P.Sevvel – Solar Parabolic utensil-16.08.2019
- Dr.P.Sevvel – Helmet with Integrated Camera-11.07.2019
- Dr.S.Baskar & Mr.Anantha Raman Lakshmipathy – Smart Bio Transesterification process for biodiesel Extraction-02.08.2019

File Description	Document
Any additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 19

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	4	5	3	3

File Description	Document
Report of the event	View Document
List of gender equity promotion programs organized by the institution	View Document
Any additional information	View Document

7.1.2

1. Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security
2. Counselling
3. Common Room

Response:

a. Safety and Security

The college takes utmost effort to ensure the safety and health of the students, staff, visitors to the campus. Gender sensitivity ensures that women and men enjoy the same status and have an equal opportunity to exercise their human rights and realize their full potential, especially young women. To promote the gender sensitivity, Women's empowerment cell is open to female faculty, professional staff and girl students. Several programmes under gender sensitization were conducted on various topics such as Personal hygiene and Women's day which create awareness and aims at changing behavior of students by enabling their comfort the study spot, work place and also ensuring professional growth. . Separate common room is available for both boys and girls students. If the students suffered by health issues, college has the medical facility inside the campus.

The institute arranges medical camps for students and faculty members.

1. Seminars on women's hygiene are provided to all female faculty members and students.
2. Timings for entry and exit into hostels are strictly maintained.
3. Fire extinguisher is placed at different blocks inside the campus for providing the security.
4. CCTV cameras are located in the entire campus.
5. First Aid box is available in every department with common medicines.
6. <https://saec.ac.in/anti-ragging-helpline>
7. <https://saec.ac.in/complaintsagainstsexualharassment>

The proofs of the safety measurements are maintained by securing the certificates duly certified by the authorities concerned. They are as such the Structural Soundness certificate certifying the stability of all the blocks of the buildings. The institution is also certified for the safety from fire.

Canteen and Hostel Mess maintains the safe and hygiene provision of food and is also duly certified. The kitchen of the Hostel and canteen mess is certified by LPG for the safe use of the gas provision.

The institution offers clean and good ground water and also possesses Water Quality Certificate. All the electrical appliances are maintained in a good conditioned and is certified for electrical safety.

The staff and students of the institution utilize the lifts in all the blocks and for the same it has been certified. We take all the precautionary efforts for the safety and security of the students and staff and there are enough number of fire extinguishers available in all departments and laboratories.

The whole institution is under CCTV surveillance for the safe access of the staff and students including the hostel (men and women).

The institution has also been certified by **ITC - WoW** for the proper Waste Disposal management.

b) Counseling

Counselling can offer students a space to talk and think about problems and difficulties, and many find it helpful to be able to do this with someone who is not a friend or family member. Counselling is not about giving advice, but can help the faculty to understand the difficulties of students. Faculty can help students to make decisions and changes that may work better.

The institute comprises of a Faculty Advisor for 18 to 20 students with a class advisor each for every class. The Faculty advisors maintain a Proctor card related to every student with detailed information about the academic & personal record. The institute comprises of an effective attendance monitoring system through which information about absentees is given to parents and reason for getting absent is obtained from the parents. Any issue regarding a student is informed and solved with the help of parents. The faculty advisor conducts counseling session 4 times in a semester and mentors the student to progress in academics.

Activities conducted as a part of academic counseling unit

Mrs. V.O. Sangeetha is appointed as the authorized counselor for the institution.

An individual session was provided for the weaker students and for those students who requested for it.

Students are regularly monitored by the assigned faculty member keeping track of their difficult areas in studies and their personal life.

Online grievances are received through: <http://www.saec.edugrievance.com/>

c) Common Room

Separate common room is available for both boys and girls students. The students utilize these for having lunch and also for common discussions.

d) Health Care Centre

The institute comprises of a Health Care Centre inside the campus with bedding facility. A registered Medical Practitioner with an Assistant is available throughout the day with required medicines and injections.

File Description	Document
Any additional information	View Document

7.1.3 Alternate Energy initiatives such as:**1. Percentage of annual power requirement of the Institution met by the renewable energy sources**

Response: 4.87

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

Response: 126348

7.1.3.2 Total annual power requirement (in KWH)

Response: 2592000

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 8.89

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 9.11

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 102.441

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	View Document

7.1.5 Waste Management steps including:

- **Solid waste management**
- **Liquid waste management**
- **E-waste management**

Response:

a. Solid Waste Management

At S.A. Engineering College the solid waste are collected and segregated as degradable and non-degradable waste and it is transported to the nearest municipal waste collection area through trucks.

Proposed management of solid waste: Solid wastes are collected daily and dumped in pits excavated for this purpose inside the campus area and allowed to decompose.

Waste Collection Details

Location:

Ø Class rooms, Labs, Staff rooms

Ø Dining area

Ø Common Area.

Materials Use for Collection

Ø Gloves

Ø Garbage Bags

Ø Face mask

Procedure

Ø Meeting with students

Ø Meeting with workers, sweepers.

Ø Garbage collection inside the campus

Ø Segregation of waste.

b. Liquid waste management

Liquid waste includes waste from labs, kitchens and other waste water. As the waste water is non hazardous, it is cleaned and the recycled water is diverted to the garden to maintain plants inside the campus.

c. E-Waste Management

Discarded electrical or electronic devices which are for refurbishment, reuse, resale through material recovery or disposal are considered as e. waste. Electronic scrap components such as CPUs contain potentially harmful chemicals such as lead, cadmium, brominated flame retardants.

Our Institution takes great care to make sure that the E- waste in the college is disposed in a proper manner.

Old computers and its accessories are sold as scrap to M/s. VIROGREEN INDIA Pvt. Ltd., designated as authorized buyer by the TamilNadu Pollution Control Board. For this purpose, MoU has been initiated with the firm.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

S.A.ENGINEERING COLLEGE has implemented rainwater harvesting, which has saved significant amount of water. **CSE, ECE & MECHANICAL** blocks have rainwater-harvesting structure and the rainwater is allowed to go underground through the structures. The rain water which is channelized to raise the ground water level. Since the college well is much below the road level, water level rises in rainy season. Water collected from terrace by **PVC pipe (4 inch pipe)** outlet depends upon the area and number of pipes provided. Water is flowing through the pipes and drains in the rainwater harvesting pit. The drain wells are constructed for water collection & recharge of surrounding ground. Rain water pit is filled with gravels and sand for percolation of water for recharging the surrounding ground area. Total 3 numbers of **3'0" dia 5'0"** depth rain water harvesting pit are available at the campus

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.7 Green Practices

- **Students, staff using**
 - a) **Bicycles**
 - b) **Public Transport**
 - c) **Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

Response:

Environment consciousness is the mission of the institute and tree plantation is the major concern of the management to maintain the unblemished purity and beauty of the college to provide a congenial atmosphere for the academic and non-academic pursuits. The entire campus has landscaping with green grass, ornamental plants and shady trees making the campus very green and beautiful. College is very proud of this green and pollution-free atmosphere which is conducive for good educational ambience. For this a well grown (ranging from 4 to 5ft) trees which is good in oxygen supply and requires low maintenance and water demand, were procured from a nursery and kept stack in the college premises. Lawns have been developed and maintained. Nurturing the existing trees and making the environment green is one of the pursuits that develop eco-concern among the students. As part of this exercise, been involved in planting saplings in the last few—The infrastructure and facilities available on campus are amongst the very best. It is a wholly self-contained campus comprising of everything that students on campus would ever require.

Bicycles

In S.A. Engineering College few non-teaching staff as well as some students uses bicycles to come to college.

Pedestrian Friendly Roads

Pedestrian Friendly Roads are used by students, staff and others to move around the campus.

Plastic-free campus (Single Use)

To create awareness among the students about the harmful effect of single use plastic materials and to try to make college as a plastic free campus, International plastic free day (**3rd July**) was celebrated.

Energy conservation

In our college, classrooms have number of large windows, so natural light are sufficient instead of using the electric lights.

Use of renewable energy(SOLAR PANEL)

Solar power is utilized for 21 Streets lights. (Per day Average of 76 KWHR Power saved)

The college is using solar powered heaters which have been installed in the boy's hostel from 2007.

Plantation:

Tree plantations are organized regularly to create clean and green campus. NSS\YRC coordinator organizes tree plantation internally and externally for every semester.

Hazardous waste management

The use od Hazardous chemicals is minimal. Lab In-charge takes care of the chemicals and safeties norms in the laboratory are strictly followed. Students are made aware of the hazardous chemicals and safety aspects when they are given instructions before utilizing the chemicals. The labs are well ventilated and spacious and equipped with exhausts. 24 hours water supply is available in labs and safety of the students is given top priority in planning a facility.

E –Waste management:

The e-waste generated is given to the authorized dealers who purchase the scrap and reuse the useful components. The e-waste materials are collected and kept in one place and then sold to the concerned recycling agents M/s. VIROGREEN INDIA Pvt. Ltd

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years**Response:** 0.41

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
5.38	5.36	5.34	5.32	5.30

File Description	Document
Green audit report	View Document
Details of expenditure on green initiatives and waste management during the last five years	View Document
Any additional information	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. Physical facilities
2. Provision for lift
3. Ramp / Rails
4. Braille Software/facilities
5. Rest Rooms
6. Scribes for examination
7. Special skill development for differently abled students
8. Any other similar facility (Specify)

A. 7 and more of the above**B. At least 6 of the above****C. At least 4 of the above****D. At least 2 of the above****Response:** C. At least 4 of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
Any additional information	View Document
link to photos and videos of facilities for Divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 12

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
5	4	1	2	0

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document
Any additional information	View Document

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 51

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
13	3	11	17	7

File Description	Document
Report of the event	View Document
Any additional information	View Document

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document
Any additional information	View Document
URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics	View Document

7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description	Document
Any additional information	View Document
Provide URL of website that displays core values	View Document

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	View Document
Provide link to Courses on Human Values and professional ethics on Institutional website	View Document

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Any additional information	View Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 38

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
9	3	9	13	4

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

Our Institution Organizes National Festivals and Birth and Death Anniversaries of great Indian Personalities with enthusiasm. Our students are on a mission towards better India by breaking the boundaries of religion and caste. Thoughts of great Indian personalities sowed into the young minds through the exhibitions and programs conducted on these days. The institution practices pluralist approach towards all religion functions and encourages the students and faculty to showcase the same. 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.

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. Dr. A.P.J. Abdul Kalam Remembrance (Innovation Day): Our students celebrated the Abdul Kalam Remembrance Day on 26th of July. On this day the great leader was remembered and these quotes were charted by the prepared by the students. The students also delivered a speech about him and his great activities.

2. Dr. Sarvepalli Radhakrishnan (Teachers Day): Our students organize teacher's day celebration on 5th September. They invite teachers from all the departments and honor them by presenting them with gifts and greeting cards. The students also prepared charts with teacher's day special drawings and quotes. The students also conduct cultural activities dedicating it to the teachers.

Gandhi Jayanthi: A standout amongst the most mainstream events in India and one of the three national occasions, Gandhi Jayanti is praised in our Institute on 2nd October of consistently to stamp the birth commemoration of Mahatma Gandhi. Gandhi was additionally famously known as the Father of our Nation, Bapu or basically Mahatma. .

File Description	Document
Any additional information	View Document

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

Financial Transparency

An institution maintains its financial transparency in the execution of the academic activities in a budgeted manner. Institutional budgeting is the process wherein the plans of institutional programs are transformed to an orderly, itemized, systematic operation of academic activities for the enrichment of the

students, teaching and non-teaching faculty.

Budget serves as the actuator for the anticipated and actual revenues and expenditures. The procedure of the institutional budget encompasses the principal's discussion with the trust members about the previous academic year expenditure. Then he initiates the respective the administrative officer, department heads, physical education department, library research and development head, placement head, hostel in charge and canteen in charge for the preparation of the budget with the anticipated expenditure for the current academic year. The administrative officer of the institution prepares the budget including the expenses such as the salary for the teaching and non-teaching faculty, administrative expense, Medical expense, electricity expense, General programmes expenses and so on.

The Head, Research and Development prepares the budget based on expense of the Research Centre, funded projects and consultancy projects proposed to carry out for the academic year. The Placement Head formulates the budget to conduct trainings for the staff and students and for making arrangements for the placement of students.

The senior librarian prepares the list of books, magazines, newspapers, journals and periodicals for purchase for the main and department library recommended by the library coordinators of the departments, duly verified by the heads of the departments and obtains the approval of the head of the institution. The heads of the departments have the authority to enhance the department infrastructure bringing in new equipment and software for the laboratories as per the requirement of the Anna University.

Hostel and canteen in charges fix the budget for store maintenance, salary, furniture and fitting. Transport head formulates the budget for vehicle purchase if there is any and for maintenance and fuel.

Physical Director fixes the budget for the expenses in conducting zonal and inter college sports, training and for the purchase for new sports materials.

All the in charges get the approval of the head of the institution in the budget prepared for the academic year. And the same would be presented by the Principal in the Trust Meet. Once the trustees approve the budget, the fund is released by the Chairman and the Secretary along with the Treasurer. The fund is then transferred by the Principal to various in charges to execute their budgeted activities. After the utilization of the fund the in charges prepare the statement for the income and their expenditure. These statements are collected and an overall expenditure statement for the academic year is prepared by the Principal and the same is presented by him in the Trust meet. And thus the budget in an institution takes its cyclic performance. Furthermore, all these activities are documented ISO formats and duly verified and approved every year.

File Description	Document
Any additional information	View Document

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:**1. Title of the Practice:**

Assessment of Programme Outcome & Faculty Development

2. Goal:

The aim of the practice “**Assessment of Programme Outcome**” followed by the Institute is to create a platform to enrich Students Performance and Placements, motivate to do higher studies to improve global economy and faculty productivity.

3.The Context:

Every semester, Result Analysis is done to evaluate students’ performance and corrective measures are taken for further improvement. Placement records are analyzed every year and feedback from the employers is also collected. Industry oriented training is imparted to the students to enhance their employability skills. Up gradation in acquiring updated technical skills is ensured through innovative projects.

360 Degree evaluation (Students feedback, Head of the Department’s report, Principal’s report, and Administrative feedback) for faculty is done. Academic Excellence Committee analyses the same and takes measures to fill the gap in teaching efficacy by arranging training and orientation programmes to enrich the eminence.

All faculty members are encouraged to take up research works to obtain higher degree and research project funds from outside agencies to establish world class research laboratories and increase the status of the Institute.

4.The Practice

Distribution of responsibilities in teaching and learning is mapped to effect significant Strategic change and enforce institution-wide policies. Caliber of the faculty is identified for successful implementation of reforms to strengthen their commitment to improve quality teaching. Heads of departments are given explicit responsibilities for nurturing quality teaching and learning and ensure that the leadership responsibilities are utilized to achieve the desired results.

A conducive atmosphere is created for everyone (teacher, student, support staff, etc.) to identify a clear leadership structure. It is ensured that the teaching and learning framework can be easily adapted to reflect teaching faculty’s values, ethos and modus operandi. Progress in implementing the framework is monitored and reports are analyzed by the department heads and Principal. Appropriate platforms exist for sharing experience and initiatives across the institute.

5. Evidence of Success

Evidence of success, benchmarks and review of results exist. The students’ performance in university

examinations have been gradually improving. Many faculty members have completed and awarded Ph.D. degree and some more are in the verge of submission of their Thesis. This practice helps increasing the number of national and international research publications. Students are highly motivated in innovative projects and won prizes in technical competitions and published research papers in conferences and workshops. Students are also inclined to pursue higher education to quench their thirst in modern technology. This helps to enrich the society and the quality of life as well.

6. Problems Encountered and Resources Required:

Some students' lack of concentration in studies necessitates the implementation special attention through special coaching classes. Regular tests are also conducted through there may be decrease in percentage sometimes. Students are thrown open to the practice in problematic subjects through Assignment books. Counseling rendered through continuous monitoring to bring out the best of them. Consistent monetary and moral support is extended from the management in upgrading research laboratories, conducting seminars, workshops, symposia for enhancing the students' career.

BEST PRACTICES II

1. Title of the practice

Daily attendance monitoring

2. Goal

To achieve 100% attendance in each class

3. The context

Difficulty in coping with the studies results in disinterestedness towards studies. Some such students are inclined to slight learning and absent themselves to the classes. In view of evading unnecessary absence to the classes.

4. The practice

Students' attendance is monitored everyday by the Faculty advisors. If any absence is identified, the parents are intimated and reason for absence is obtained. An entry of the same is done in a register

exclusively maintained for this purpose. The register is taken to the perusal of the Head of the departments and the Principal and acknowledged by them. The absentees are counseled by the Faculty advisors to make them committed to their studies which eventually fetch a good attendance.

Circular for 100% attendance

5. Evidence of success

This regular follow up of students and parents every day, aids to track the students and keep them in the streamline. The number of students produce 100% attendance is getting enhanced.

6. Problems encountered and Resource required

In alignment with the absence, some parents do not respond the faculty properly which may affect the result of the students. Contingent upon the parental response they are given an understanding of the necessity of the attendance to cope with the studies. Students are also counseled and guided individually in bringing up the interest in learning. Identified repetition in individual's absence is taken to the attention of the Head of the department and the student is counseled by the department head. Long absence is also encountered occasionally due to the ill-health of some students and notification is sent to the parents for a meeting in person. Parents and students are counseled for unaffected continuance of studies.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

1. Title of the Institutional Distinctiveness:

Research and Development

2. Objectives of the Practice to reach its vision

Ø The Research & Development is to facilitate academic research for the development of the academicians and the institution.

Ø It aims to bring about a dynamic equilibrium with its social and economic environment for excellence in education, research and service to the nation.

Ø To explore unreached areas by bringing openness in multi-disciplinary research.

Ø To provide a supportive research environment in which scholars, at every stage of their career, can flourish and develop.

3.The Context of priority

SAEC has been the key contributor of Research and Development in nurturing the faculty and students through various academic programs conducted by the different departments. Students and staff have been encouraged to carry out innovative, sponsored research works in the departments in terms of development and technology. SAEC is committed to knowledge transfer and engross technology transfer in order to enhance the quality of socio-economic and ecological conditions of society.

As a part of the career enhancement, faculty members are thrown open to the opportunities to register for PhD degrees. A large number of faculty members in various departments are pursuing Ph.D. programmes. The number of publications in reputed, peer-reviewed journals, which is a good sign of research output, has been quite substantial during the last three years. Interdisciplinary approach is being used to address common issues in society.

4.The Practice of Thrust over the achievement

- o Devise strategies to assist the research scholars in meeting their research objectives
- o Periodical review of research strategies and plans of department developments through road map
 - o Analyzing the road map areas for initializing inter disciplinary research
 - o Identification of new initiatives and opportunities in the innovation area
- o Effective publication of the research works in reputed journals and conferences
- o Identification of social issues and bringing about a solution to the issues

5.Evidence of Success

S. A. Engineering College has been recognized as a Research Center Approved by Anna University,

Chennai for the following Departments.

1. Department Of Mechanical Engineering
2. Department of Electronics and Communication Engineering
3. Department of Electrical and Electronics Engineering
4. Department of Computer Science and Engineering

The institute has executed many major Research and Development projects funded by government and non-government organizations such as AICTE, MRNE, SERB, CSIR, and DRDO etc. Ample number of staff have registered for their Ph.D. programmes and pursuing with the same. The Research Centers help the staff and students to render a consistent attentiveness towards their research works as a part of their professional enrichment. Students and staff have published papers in various reputed Journals and National and International Conferences.

6.Problems Encountered and Resources Required

The reception of funds for the implementation part of the projects. Sometimes high cost is involved in executing research activities specifically concerning capital equipment. The management partially provides optimum funds to implement the research practices to the possible extent. The institute also receives funds from outside agencies, which greatly helps in upgrading research laboratories and promoting the practice.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5. CONCLUSION

Additional Information :

Our college has a well-established framework for the implementation of Quality initiatives, Teaching learning process, to improve on Customer related feedbacks. Resource Management Library and Laboratory related process are well defined as per ISO 9001:2015 standards.

IQAC cell operates in full swing and monitors the overall Teaching learning process .IQAC also looks for Quality implementation such as NBA ,NAAC for the college.

Our college has signed various Memorandum of Understanding between companies so as to improve industry institute interaction. Value Added Courses, Industrial Visits, Inplant training, Internships, Field Projects are also provided to students

Placement team takes charge of providing Business English Certificate to students in the second year, Soft skills, Technical training during the Prefinal and Final years

Exam Cell works with a team of young and energetic faculty to frame the Timetable for internal test, Hall allocation, Allocation of Faculty for invigilation duty, Monitoring the students and prevention of malpractice. Professors monitor the student for their performance during tests. Non performers are identified by the Professors and those students are asked to rewrite the test

S.A.Engineering college has Enterprise Resource Planning software Insproplus Software which deals with the over all teaching learning process , Student details entry, Attendance entry, Mark entry for Internal Assessment etc

Concluding Remarks :

With strong quality management culture embedded into our system of Teaching Learning, Research and Governance, we strive hard to serve all the stakeholders. Our institution emphasizes quality Technical education to develop new knowledge, New professional practices for the betterment of society. We take all the feedback from our existing practices and reunite the practices by keeping our strategic objective intact. New courses on the new ways of knowledge is planned to cater to the need of digital transformation in all the aspect of business. By developing better quality manpower, we will be contributing significant part in Indian Technical Scenario.