

# FOR 1<sup>st</sup> CYCLE OF ACCREDITATION

### SYED AMMAL ENGINEERING COLLEGE

DR.E.M. ABDULLAH CAMPUS, SYED AMMAL ENGINEERING COLLEGE, ACHUNTHANVAYAL POST 623502 syedengg.ac.in

#### Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

January 2022

#### 1. EXECUTIVE SUMMARY

#### 1.1 INTRODUCTION

Conceived and executed in 1998 with a far-sighted vision to transform the socio-economic profile of the region by Dr. E.M. Abdullah, the doyen of medical fraternity of yesteryears, the College eponymously takes its name from the cherished memory of his gifted mother, the late Syed Ammal, who was the moving force behind the fleet of other illustrious institutions – Syed Ammal Higher Secondary School, Syed Ammal Matric and Higher Secondary School, National Academy Montessori Matric Higher Secondary School, National Academy School, National Academy Matric School, Syed Ammal Arts and Science College, Syed Ammal Trust Hospital - the precursor institution of the Trust - Raasi scan and A.R. Hospital, all with an overarching humanitarian and social focus to uplift the educational standards and wellbeing of the region and beyond - that were to rise up one after another, circa, over a span of six decades. From its humble beginnings, Syed Ammal Engineering College (SAEC) has striven over the years to bloom into an institution of repute and standard in the comity of institutions of its elan and calibre. Affiliated to Anna University, Chennai, and approved by All India Council of Technical and Education (AICTE) and the State Government, the college offers graduate programmes in Civil Engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Mechanical Engineering streams and post-graduate programmes in Computer Science & Engineering, Embedded System Technologies, VLSI design, Manufacturing Engineering, Master of Business Administration (MBA). Spread over an extent of 25 acres of landmass, amidst serene and salubrious environs, the college has state-of -the- art technology and avant-garde resources for its academic and administrative apparatus - be it library, pedagogical aides, class rooms, computing systems, laboratories, workshops or hostels and cafeteria, and even sports and leisure, besides housing a score of professional bodies and chapters, including that of IEEE, ISTE, CSI, IETE, IE (India) and SAE on the one hand and fine arts and culture on the other, to enliven and burnish the seemingly heavy and dreary weltanschauung of engineering education.

#### Vision

• To be an Institute of eminence and to evolve disciplined and globally competent engineers and technocrats.

#### Mission

- Generating an enabling environment for academic excellence through quality work.
- Moulding rural students into professionally competent and intellectually proficient employable force through curricular, co-curricular and extra-curricular activities.
- Creating globally talented human resources with ethical outlook and moral values, for the larger benefits of the society

### 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

#### **Institutional Strength**

The objective of carrying out SWOC analysis is primarily to understand the shortcomings of the institutions both quantitatively as well as qualitatively. This exercise also results in identification of appropriate areas of technology and thereby helps in developing industry ready employable graduates. The Principal, the Heads of the Departments, the faculty, supporting and administrative staff and sample of students of all branches participated in SWOC analysis. The major inputs considered are 1. Teaching-learning 2. Research & extension activities 3. Students Progression 4. Infrastructure & Financial Support 5. Human Resources

Three UG programmes such as CSE, EEE & MECH were Accredited by NBA. ECE, CSE, EEE & MECH. Departments are recognized as Research centres by Anna University, Chennai. Three UG Courses such as ECE, CSE & EEE have got Permanent Affiliation by Anna University, Chennai. Eco-friendly and conducive learning atmosphere. Well maintained state-of-art building infrastructure and laboratory facilities. Sustained and Valuable Suggestions given by the Stalwarts of educational system, Dr. M. Abdullah Khan, Former Dean of Anna University and Prof. M. Salihu, Former Vice Chancellor of MK University, since the inception of the college to till date, for the development of the institution. Constant encouragement given to the faculty members in pursuing their research leading to 25 Ph.D. holders in various departments. Among them, 12 got Research Supervisor Recognition from Centre Anna University, Chennai. Our research centres has produced 40 Ph.D scholars in various specialization. The faculty members of our college published more than 600 research papers in reputed journals and conferences. The faculty members of our college published more than 50 Books in reputed Publications in India, Switzerland, Germany etc. The faculty members of our college got more than Rupees Ninety Lakhs various funding Agencies like AICTE, Anna University and TNSCST etc. Our College has organised National and International conferences sponsored by IEEE, AICTE etc. Our College has organised more than 500 Workshops/Seminars/Faculty and Student Development Programmes/Guest Lecture/Symposium sponsored by CSI, ISTE, IEEE, AICTE, TNSCST etc.

#### **Institutional Weakness**

Majority of students are from rural areas with Tamil as the medium of instruction in school level. Hence, Academic performance and GATE qualifying students are low. The institute industry interactions are not upto the level because the institution is situated in the rural area, where there is less number of industries. Less number of sponsored research projects from external agencies. Robotics and Automation related facilities are not available. Non-Availability of industry supported laboratories. Entrepreneurship efforts need to be improved.

#### **Institutional Opportunity**

An improved research environment can be foreseen as good number of faculty members pursuing Ph.D. Empowering all the faculty members by analyzing ways and means to undertake consultancy projects. Students internship in industries will be encourage. Students participation in club activities and intercollegiate competitions Preparing students for GATE, BEC and aptitude Examinations Scope of PG students to pursue Ph.D. under the supervision of the faculty members of the institute in association with the Affiliating University. Enough Areas are available to develop Technology Incubators and to initiate activities in association with NGO's & Government organisation. Introduction of curriculum beyond syllabus will help the students to improve their employability skills More opportunities to place the students in MSME Industries by consistent efforts and MoU's with organization like ICTACT, etc.,

#### **Institutional Challenge**

Training rural based Tamil medium students in English language and developing their communication skills is really a challenging job. Competition from Autonomous Institutions/ Deemed Universities functioning in the nearby areas. Bridging the curriculum gap to meet fast changes in technology and the industrial needs.

#### 1.3 CRITERIA WISE SUMMARY

#### **Curricular Aspects**

The Institute follows the curriculum prescribed by the Anna University. The curriculum is well translated to the students after through preparation as well as critical thought by the teachers concerned.

- Choice Based Credit System introduced in 5 UG programs and 5 PG programs from the academic year 2017-18.
- 709 new courses have been introduced in the past 5 years. The institution encourages the faculty to keep themselves update their knowledge by offering refresher courses, faculty development programmes and workshops. In addition, the institution has provided 50 value added courses and 33 certificate courses to students for developing skills to bridge the gaps in the syllabus.
- About 70% of students participated in certificate and add-on courses.
- Institution is sensitive to gender, environment issues, human values and professional ethics. Anna University has introduced courses on professional ethics, Human values and Environmental science.
- Departmental activities are scheduled which include Industrial visits, Implant training, Guest Lectures, Symposium, Seminars, Conference, Placement and Training and Association activities.
- About 70% of students have undertaken the field projects and internship every year.
- The IQAC academic coordinator monitors and assists the faculty members for effective curriculum delivery.

Department invites suggestion and feedback from students, teachers, employers, Alumni and parents regarding the curriculum and institution ensure its availability in the website.

#### **Teaching-learning and Evaluation**

- Average 56.93% of seats are filled as per the applicable reservation policy. Institution conducts induction program for the students after admission.
- Based on the marks attained in the internal exams and their performance in the learning process, the students are categorized into advanced and slow learners.
- As on date, three students from differently abled category registered in the Institution. At the beginning of each semester, the college level academic calendar is prepared with all essential details viz., reopening and closing dates, internal examinations dates, holidays, college level activities.
- The department prepares the academic calendar in align with the college calendar by including department specific activities and events.
- Each department distributes the calendar to all students and faculty members to plan their activities. The time table and the course plan are prepared well in advance.

- The faculty members are assigned courses based on their competency matrix, subject expertise and experience. Each faculty member prepares the structured lesson plan, detailed course materials, question bank for theory subjects and lab manual for practical subjects as per guidelines given by IQAC.
- Faculty members incorporate the teaching pedagogy considering experiential learning, participative learning and problem solving methods in content delivery during their preparation.
- All the faculty members use ICT for effective teaching-learning process. Each faculty member is assigned with 15-20 students for mentoring.
- Institution has faculty members with Ph.D degree in the academic year 2018-19. Class Committee meetings are conducted thrice during the semester.
- The chairperson of the committee communicate the rules and regulations of the department, examination procedure, discuss the syllabus completion and collect feedback on academic and administrative difficulties faced by the students.
- Based on the feedback, appropriate remedial measures are put into practice to improve the performance of the students.
- The major decisions/ improvements done based on the feedback received are communicated to the students. OBE is implemented in all programmes.
- The information on POs, PEOs and COs are communicated to the stakeholders. Student attainment of learning outcomes is measured by checking the level of CO and PO attainments for all the courses.

#### Research, Innovations and Extension

Research, Innovations and Extension Institution has a dedicated team of researchers headed by a Director (R&D). A senior faculty member in each department has been nominated as research coordinator. Faculty members and undergraduate/postgraduate students are provided with adequate resources to pursue research in their respective field of interest. Students are encouraged to take up research project under the supervision of the faculty members. 38 workshops/ seminars are conducted on IPR & Industrial linkages. During science expo, students are displaying their gadgets to encourage young minds who visit the expo. The Institution has 32 Ph.Ds holders, 19 pursuing Ph.D. and remaining faculty members are working collaboratively. The faculty members pursuing research are encouraged by providing them the required equipments, books, leaves for research work, financial assistance for conferences/journals, e-resources, computer facilities, Wi-Fi etc. The college provides incentives to the faculty for their research contribution. Research meeting is conveyed to discuss proposals to funding agencies. The departments of CSE, EEE,ECE and Mechanical Engineering are recognized as "Research Centers" by the Anna University. 17 faculty members are recognized supervisors of Anna University and other Ph.D holders are motivated to obtain supervisor recognition. The faculty members who do not possess Ph.D degree are advised to register for research work. The institution has a well defined code of ethics to check malpractices and plagiarism in research. Institution honors the teachers who receive recognition and awards. 238 research papers have been published in the UGC recognized journals. 83 papers have been presented in national/international conferences. 30 books have been published by faculty members. Institution has an Industry Institute Partnership Cell (IIPC) which has signed 15 MoUs with Industries to carry out collaborative work in project development and consultancy. 292 industrial linkage program such as internship, field trip, on-job training and research have been organized. Faculty members and students are actively involved in 24 Institutional Social Responsibility activities through structured forums like NSS, YRC, Rotract and Clubs and Societies. Many recognition and awards are received for various extension activities from University, State level agencies and NGOs.

#### **Infrastructure and Learning Resources**

The college has all the necessary facilities with experienced and well qualified faculty members to develop the young minds with high academic ambience. In accordance with the increasing enrolment, there has been remarkable improvement in infrastructure facilities. In our college has well-equipped Laboratories with equipment as per the curriculum along with high-end equipment's are also available for student projects and research, computer, laboratories and centres, a library with all the modern e-amenities, auditorium, seminar halls, common areas and class rooms equipped with modern ICT tools for intense learning. The college also has adequate space and amenities to conduct competitive exams like GATE, TNPSC, and TRB and organize National level competitions. The Institute library functions in a separate building with built-up area of approximately 911.87sq.m. SAEC library maintains all the books and journals are per AICTE norms. Digital access of resources is provided for teachers and students. Rare books are collected for faculty members to network events. Sports facilities are provided and students are encouraged to take part in inter class, college, university and national competitions. All of the classrooms and seminar halls are equipped with ICT facilities. The buildings are kept clean by housekeeping staff members. Institution has 90 MBPS internet connection to provide quality bandwidth to all the students in the laboratories and to the staff in the staffrooms and office. There is one computer for every two students in the campus. The Institute makes adequate budgetary provisions for the upgradation of infrastructural facilities including maintenance of building and housekeeping. There are established systems and procedures for maintaining and utilizing physical, academic and support facilities -Seminar, laboratory, library, sports complex, computers, and classrooms. All the other supporting facilities such as playground, canteen, transport, gymnasium and dispensary are available in the campus.

#### **Student Support and Progression**

Institution has 2009 students from diverse background. To meet the needs of the students, student support service of our college is administered through a faculty advisory system. Department has faculty advisor system where 10-15 students are allocated to each faculty member for counseling and to improve the academic performance of the students. The Institution offers scholarship and financial assistance to academically strong and economically weak Students. On an average of 71% of students are benefited by scholarships and freeships provided by the government. 43% of students are benefited by the scholarship/concession provided by the institution besides government schemes during 5 years. The Training and Placement Cell of the college extends its service in the form of career guidance, resume building, soft skill training, technical training etc. It also supports campus recruitment in the form of pre-placement talk. 563 students are benefited from the training in the year 2020-21. 74% of students benefited from the training over 5 years. 28% of students are benifited by career counselling and guidance for competitive examinations offered by the Institution during the last five years. Library has materials for students who prepares for the competitive exams. Departments encourage students to participate in State, National and International level of curricular and co-curricular events.

The NSS, YRC and Rotract club of our institution motivate the students and staff to participate in the extension activities such as awareness rallies for Blood donation, Health camp and orphanage visits. 100 cultural activities and sports competitions organized in the campus during the last 5 years. Institution has a well defined redressal cell for addressing anti-ragging and sexual harassment. Antiragging and sexual harassment committees are established in the campus. Institution has an exclusive placement division under the headship of a Placement Officer. 75 companies have recruited the students. Highest salary offered during this year is 3.5 Lakhs per annum. Institution has alumni association meeting every year. All the passed-out students are members of the alumni association.

#### Governance, Leadership and Management

The governing of the institution has an effective and transparent system in order to satisfy the vision and mission of the Institution. The institution has clear organizational structure and an effective decentralization. Regular periodical meeting has been conducted by the Governing Council in which various points for the development of the institution were discussed and the respective corrective actions were made. The Principal of the institution has an cordial relationship with the Management which makes easier the discussion of the infrastructural needs, development, administration and appointments. Management participates in the college functions viz., Graduation Day, College Day, Sports Day, Conferences etc. The Principal is the Academic and Administrative head of the college and responsible for the implementation the Vision and Mission of the college. All departments of the institution have a clear perspective/ strategic plan and it is deployed effectively. Each functional body is clearly defined with service rules and procedures. There are well defined procedures for the recruitment and promotion. Institution has implemented e-governance in the all the areas of administration. Various bodies/ cells/ committees are working effectively and regular meetings are called for the discussion and recorded. Various programmes viz., Career Guidance Programmes, Workshops, Value added course, symposium, social activities, Seminars and Conferences were organised in order to enrich the knowledge and showcase the talents of students. Teachers benefited with financial support for attend conferences/ workshops and towards membership fee of professional bodies. More number of professional development/ administrative training programs organized in the campus for benefits of teaching and non teaching staff during the last 5 years

#### **Institutional Values and Best Practices**

The key aim of our institution is to promote education that would be sensitive to the needs of the various sections of the society with special emphasis on gender equality and gender sensitivity. The gender equity programs are organized by the institution to promote awareness about the importance of women's education for the betterment of the imminent society. In order to enhance the values and social responsibilities among the student community particularly for women, the institution has frequently organizing various programs like international women's day, entrepreneurial awareness programs for women and women's safety. These types of initiatives are proliferating consciousness among the student community to be the better citizens of the nation. The annual power requirement of the institution has fulfilled by the solar energy of 100 KW. The run off rain water from the terrace is channelized into the ground through the pipes, which are located in all buildings of the campus. The entire campus is dotted with trees, plants and lawns which are well maintained. The campus is green covered around 60% of pruned trees which are watered and appropriate care is taken for their maintenance. The institution is also maintaining complete transparency in its financial, academic and administrative progresses. Our institution is operating the practices like the development of employability skills by mentoring the students with the dedicated faculties. The establishment of placement cell in our campus is molding our students to prepare themselves as per the requirements of the industries. The Entrepreneurship Development cell is constantly inculcate entrepreneurial spirit and culture among engineering and management graduates and also motivate them to start up their businesses. The institution has its own unique diversified activities like co curricular and extra-curricular with concentrating on the social needs of the students. The campus has its distinctive infrastructure which includes well equipped laboratories, good volume of books and journals, medical care center, security systems, wide transportation facilities, indoor and outdoor play grounds, seminar hall and auditorium.

22-08-2022 11:15:04

### 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College		
Name	SYED AMMAL ENGINEERING COLLEGE	
Address	Dr.E.M. ABDULLAH CAMPUS, Syed Ammal Engineering College, Achunthanvayal post	
City	Ramanathapuram	
State	Tamil Nadu	
Pin	623502	
Website	syedengg.ac.in	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	M. Periyasamy	7868-821984	9842529558	9487-304000	nba@syedengg.ac.i
IQAC / CIQA coordinator	B.jayalakshm i	9940-790400	8903529252	8248-321934	shcoordinator@sye dengg.ac.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Page 8/122 22-08-2022 11:15:04

View Document

Recognized Minority institution		
If it is a recognized minroity institution	Yes Minority Certificate upto 2021-2022.pdf	
If Yes, Specify minority status		
Religious	Muslim	
Linguistic	NA	
Any Other	NA	

Establishment Details		
Date of establishment of the college	17-06-1998	

University to which the college is affiliated/ or which governs the college (if it is a constituent college)				
University name	Document			

Anna University

Tamil Nadu

Details of UGC recognition		
<b>Under Section</b>	Date	View Document
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	29-04-2021	12	NA

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

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	Dr.E.M. ABDULLAH CAMPUS, Syed Ammal Engineering College, Achunthanvayal post	Rural	25.21	102041

### 2.2 ACADEMIC INFORMATION

Details of Pro	ogrammes Offe	red by the Col	lege (Give Data	a for Current A	Academic year	)
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Electrical And Electronics Engineering	48	HSC	English	60	54
UG	BE,Electroni cs And Com munication Engineering	48	HSC	English	60	53
UG	BE,Compute r Science And Engineering	48	HSC	English	60	59
UG	BE,Mechani cal Engineering	48	HSC	English	60	55
UG	BE,Civil Engineering	48	HSC	English	60	7

Page 10/122 22-08-2022 11:15:04

PG	ME,Electrica l And Electronics Engineering	24	BE	English	18	1
PG	ME,Electron ics And Com munication Engineering	24	BE	English	18	3
PG	ME,Comput er Science And Engineering	24	ВЕ	English	18	1
PG	ME,Mechani cal Engineering	24	BE	English	9	2
PG	MBA,Master Of Business Administrati on	24	BA BBA BCOM BE	English	60	19
Doctoral (Ph.D)	PhD or DPhi l,Electrical And Electronics Engineering	36	ME	English	1	1
Doctoral (Ph.D)	PhD or DPhi l,Electronics And Commu nication Engineering	36	ME	English	3	3
Doctoral (Ph.D)	PhD or DPhi 1,Computer Science And Engineering	36	ME	English	1	0

Position Details of Faculty & Staff in the College

	<b>Teaching Faculty</b>											
	Profe	Professor			Asso	ciate Pr	ofessor		Assis	stant Pr	ofessor	
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				12				19	J			73
Recruited	10	2	0	12	10	9	0	19	37	36	0	73
Yet to Recruit		1		0		1		0			1	0

		Non-Teaching	Staff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	7			0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				45
Recruited	39	6	0	45
Yet to Recruit				0

	Technical Staff								
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government				0					
Recruited	0	0	0	0					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				29					
Recruited	23	6	0	29					
Yet to Recruit				0					

## Qualification Details of the Teaching Staff

	Permanent Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	10	2	0	8	4	0	0	0	0	24
M.Phil.	0	0	0	0	0	0	2	10	0	12
PG	0	0	0	5	2	0	35	26	0	68
UG	0	0	0	0	0	0	0	0	0	0

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

	Part Time Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	0	0	0	0	0	0	0	0	0	0	
M.Phil.	0	0	0	0	0	0	1	0	0	1	
PG	0	0	0	0	0	0	0	0	0	0	
UG	0	0	0	0	0	0	0	0	0	0	

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty	Male	Female	Others	Total
engaged with the college?	1	0	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
UG	Male	60	91	0	0	151
	Female	77	0	0	0	77
	Others	0	0	0	0	0
PG	Male	4	0	0	0	4
	Female	22	0	0	0	22
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	3	0	0	0	3
	Female	1	0	0	0	1
	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	16	29	22	19
	Female	3	20	15	27
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	76	119	150	180
	Female	50	54	84	89
	Others	0	0	0	0
General	Male	0	1	2	1
	Female	0	0	1	1
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		145	223	274	317

#### **Institutional preparedness for NEP**

1. Multidisciplinary/interdisciplinary:

Science, Technology, Engineering and Mathematics (STEM) education is now being made as a part of the curriculum framed by Anna University in which we are an affiliated college. It demands about providing the training to students to promote multidisciplinary projects and encourage product design in multidisciplinary environments through its final year projects and mini projects for various UG programmes. The curriculum and syllabus framed by the university has taken care of STEM education covering the subjects belonging to various categories like basic sciences, Engineering sciences, Professional core courses, Professional elective courses, Open elective courses, Employability

enhance courses etc.,. Apart from the curriculum, various clubs present in the institution provides an opportunity in promoting multidisciplinary activities for students and faculty members through various events conducted under their banners. The patents filed and research publications by students and faculties keeps an eye over the society's most pressing issues like global warming and their articles gives solutions through technological improvements done in renewable energy based concepts in reputed journal.

#### 2. Academic bank of credits (ABC):

The Institute follows the curriculum prescribed by the Anna University. The curriculum is well translated to the students after through preparation as well as critical thought by the teachers concerned. Choice Based Credit System introduced in 5 UG programs and 5 PG programs from the academic year 2017-18 in regulation 2017. According to clause 4.92 the student needs to obtain certification or credit to become eligible for writing the End Semester Examination to be conducted by Anna University. In case of credits earned through online mode from a University approved by appropriate authorities of Anna University, the credits may be transferred after due approval procedures from the Departmental Consultative Committee and Centre for Academic Courses, Anna University. Also a student has his credits scored in the previous institution and could continue his course in other institution transferred through proper procedure satisfying the rules and regulations of the university.

#### 3. Skill development:

The institution encourages the faculty to keep themselves update their knowledge by offering refresher courses, faculty development programmes and workshops. In addition, the institution has provided 50 value added courses and 33 certificate courses to students for developing skills to bridge the gaps in the syllabus. About 70% of students participated in certificate and add-on courses. They are also trained in the following areas as per their interest for the betterment of placements, competitive examinations and higher studies. • Communication skills in English • Basic computer programming • Aptitude skills • Leadership exposure and Professional Skill Development • Software oriented skills • Coaching for GATE examination and Higher studies • Department oriented skill developments for

	placements • Club activities Apart from the soft skill development for student our institute also cares about building ethical values to the students through moral classes discussing the human values like truth (sathya), righteous conduct (dharma) etc., which is specified in the Timetable followed.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	We in our institution teach students in their native language in conjunction with a second language utilizing differing levels of the native and second language depending on the requirements specified in lesson plans and teaching models. Teachers instruct students in a second language but are able to understand students when they ask questions in their native languages. However, teachers respond to questions in the language that could be understood by the for understanding the technical concept and characters.
5. Focus on Outcome based education (OBE):	The institute has good experience about Outcome based education (OBE) as few programmes have applied and attained NBA. OBE is practiced in the institutional system. The major decisions/ improvements are done based on the feedback received from the students. OBE is implemented in all programmes. The information on POs, PEOs and COs are communicated to the stakeholders. Student attainment of learning outcomes is measured by checking the level of CO and PO attainments for all the courses.
6. Distance education/online education:	In regulation 2017 of Anna University clause 4.8 defines Online Courses. In clause 4.8.1, Students may be permitted to credit only one online course of 3 credits with the approval of Head of the Institution and Centre for Academic Courses. In clause 4.8.2, Students may be permitted to credit one online course (which is provided with certificate) subject to a maximum of three credits. The approved list of online courses will be provided by the Centre for Academic courses from time to time. The student needs to obtain certification or credit to become eligible for writing the End Semester Examination to be conducted by Controller of Examinations, Anna University. The details regarding online courses taken up by students should be sent to the Controller of Examinations, Anna University and Centre for Academic Courses one month before the

commencement of End Semester Examination. Also

our college enormously supports our faculty members and motivates them abundantly to perform well in all academic endeavors. Our college management provides many benefits to both teaching and non-teaching staff members magnanimously. Faculty Members are eligible for the following incentives and rewards, based on their performance, contribution and years of service at the Institution. 1. For getting pass mark in NPTEL courses, they will be rewarded Rs. 1000 as cash award. 2. For getting silver medal in NPTEL courses, they will be rewarded Rs. 2000 as cash award. 3. For getting gold medal in NPTEL courses, they will be rewarded Rs. 3000 as cash award.

### **Extended Profile**

### 1 Program

#### 1.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
286	286	300	292	325

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

#### 1.2

#### Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
11	11	11	11	11

### 2 Students

#### 2.1

#### Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
797	927	1175	1363	1570

File Description	Document
Institutional data in prescribed format	View Document

#### 2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
292	292	381	381	381

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

#### 2.3

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

	2020-21	2019-20	2018-19	2017-18	2016-17
	265	311	379	425	499
T'I D		Б			

File Description	Document
Institutional data in prescribed format	View Document

### 3 Teachers

#### 3.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
108	96	109	138	147

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

#### 3.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
108	96	109	138	147

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

### **4 Institution**

#### 4.1

#### Total number of classrooms and seminar halls

Response: 47

#### 4.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
168.72	299.34	417.43	454.12	566.14

#### 4.3

**Number of Computers** 

Response: 591

### 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:**

Syed Ammal Engineering College always strives to provide quality education for the students. Our College is affiliated to Anna University, Chennai; we effectively follow the curriculum prescribed by Anna University. The institution meticulously develops and organizes various plans for effective implementation of the curriculum. At the outset, the academic council of the college, comprising all stack-holders, conducts protracted meetings with various department heads and members to develop strategies for implementing the curriculum. Academic Council Meeting is conducted every year before the commencement of the classes to identify and discuss the curriculum and curriculum gaps. Based on the meeting minutes teachers are instructed to prepare their Action Plans.

Time Tables are prepared according to Anna University rules by all respective departments. The time table contains well distributed allocation of classes for each course. It also reflects the hours for tutorial, practical courses and Co/Extra-curricular activities.

The courses are allocated to the faculty by conducting meeting by the respective Head of the Department. The courses are allocated to the faculty members based on the competency and preference given by them. Each faculty seamlessly follows the time table and department academic schedule to prepare the lesson plan for each course. Our teaching faculty updates knowledge by attending refresher courses, workshops, Faculty development programs, orientation programs, NPTEL courses, conferences and seminars organized by various colleges & Universities which help them for accomplishment of their subject delivery & curriculum more effectively.

The faculty members use various teaching methodology to make learning process more effective. They use the ICT tools such as Laptops, LCD projectors, Smart white boards, Reference books in Library, Online Journals, DELNET, and J-GATE from Digital Library, Language Labs, and Audio Visual aids for teaching the curriculum. The industrial knowledge is inculcated to the students by organizing Field Visit, Industrial Visit, In-Plant Training and Internship.

Through effective Curriculum delivery and to fulfill the curricular gap our institution has developed a structured and effective implementation of the Broad curriculum including Extra Curricular and Co-curricular activities

#### **Regular Department Heads Meeting:**

A regular meeting for heads of various departments is conducted once in a week. The meeting agenda will be fully based on development of the students through curriculum and there will be the discussion on forth

Page 23/122 22-08-2022 11:15:04

coming programs in the department.

#### **Class Committee:**

Class committees are formed for each section of class as per the Anna University norms. The meeting will be conducted thrice in a semester in the presence of faculty and students, discussing the inputs on the progress of the course, issues in learning by the students. The points discussed in the meeting will be recorded and shared with concerned faculty and HODs.

#### Feedback:

To know the opinion of the students on courses feedback are collected from the students twice in a semester. The Principal is provided with copy of the minutes of the class committee meetings and students feedback for information and corrective action (If required).

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

#### 1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

#### **Response:**

The academic calendar of the Institution prepared by the IQAC in consultation with Principal and Program Coordinators before commencement of every semester. The calendar consists of;

- Commencement of Teaching.
- Schedule for internal exams
- Last working day
- Date of practical University examination
- Co curricular and extra curricular activities

Based on the Institution academic calendar, department academic calendar is prepared by the HOD in consultation with faculty members. The department academic calendar consists of

- Schedule of internal exams
- Departmental activities Seminars/ workshops
- Value added courses and Conferences

• Co curricular and extra curricular activities

Based on the academic calendar each continuous internal exam is well planned by the exam cell of each department governed by the exam cell of the institution. Three Internal exams are conducted per semester. Syllabus for each internal exam is clearly defined at the beginning of the semester. The examination committee meets periodically to discuss all the examination related matters. Apart from this additional test for weak students are conducted.. The students can see their evaluated answer sheets and discuss the same with concerned faculty.

The policies are revised in general meeting & flexibility is given to higher authority to make run time changes for conduction of internal examination. The Principal, IQAC coordinator, HOD and examination coordinators of departments make sure that;

- 1. Completion of term work
- 2. Conduction of mock practical and theory examinations
- 3. Submission of Internal assessment marks based on continuous evaluation scheme

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

- 1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years
  - 1. Academic council/BoS of Affiliating university
  - 2. Setting of question papers for UG/PG programs
  - 3. Design and Development of Curriculum for Add on/certificate/ Diploma Courses
  - 4. Assessment /evaluation process of the affiliating University

**Response:** C. Any 2 of the above

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document
Link for Additional information	View Document

### 1.2 Academic Flexibility

# 1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

**Response:** 90.91

#### 1.2.1.1 Number of Programmes in which CBCS / Elective course system implemented.

Response: 10

File Description	Document
Minutes of relevant Academic Council/ BOS meetings	View Document
Institutional data in prescribed format	View Document
Link for Additional information	View Document

#### 1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 60

#### 1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.

2020-21	2019-20	2018-19	2017-18	2016-17
12	12	12	12	12

File Description	Document
List of Add on /Certificate programs	View Document
Brochure or any other document relating to Add on /Certificate programs	<u>View Document</u>
Link for Additional information	View Document

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

Response: 95.31

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

2020-21	2019-20	2018-19	2017-18	2016-17
413	1596	1059	1298	1055

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

#### 1.3 Curriculum Enrichment

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

#### **Response:**

We believe in giving healthy environment for all our students. The cross-cutting issues like Gender, Environmental sustainability, Human Values and Professional Ethics etc., finds plenty of space when it comes to applying them positively into the curriculum. The curriculum is by the university and it does include many of these aspects in the curriculum. There are various committees which take care of the students such as:

#### 1. Women Development Cell (Gender Equality):

This cell is formed by one senior female faculty as coordinator and all other female faculty members in the institution. Many programmes have been conducted by our institution such as International Women's day, mother's day, etc. In order to bring awareness to the Girl students about opportunities and challenges, legal issues and to train the girls mind on social issues various awareness programs were conducted like "Awareness on Entrepreneurship opportunities for Woman – Challenges and Stategies", "Seminar on Health and legal issues", "Awareness program on Counter Trafficking", "Yoga for Life", "Woman Harassment and Legal Proceedings".

#### 1. Women Harassment and Redressal Committee:

It is formed only by female faculty members consisting of one coordinator and five members and also four

Page 27/122 22-08-2022 11:15:04

student representative from the institution. This is our privilege to state that in our college the problems related to women students like Sexual nuisance, eve teasing are completely nil as we have a very good discipline system in the institution. This committee will have regular interactions with women students at regular intervals of times to identify any sort of issues existing and handles the issues with ease and confidentially.

#### 1. Environment and Sustainability:

The link between Human and the Nature cannot be broken. It should be continued. To attain this context the students of our institution were striving to protect our environment. The environment club of our institution creates the awareness on environment and nature to students. This enables the students to learn about the eco-system and other environmental factors.

#### 1. Human Values (Club Activities):

Our institution conducts many programmes on Human Rights to provide awareness among students in the form of club activities. Blood Donation Programmes Health Awareness Programmes Coastal Cleaning Tree Plantation Tamizh Sangam

#### 1. Professional Ethics:

It describes professionally accepted standards of personal, business behaviour, values and guiding principles. Codes of professional ethics are often established by professional organizations to help, guide members in performing their job functions according to sound and consistent ethical principles.

#### 1. Add-On Programs:

We conducted various add-on programs in our college to get better excellence of students and to motivate the team work ability. The students were participated in various programs, Professional development course (C, C++, Python, JAVA, Scilab, Oracle Certification, etc.) Yoga class

#### 1. Communication Skills:

Communication skill plays a vital role in the industries. The communication skills of our students are improved with the help of Communication Lab. The students will utilize the lab for developing their Reading, listening and Speaking skils.

File Description	Document
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View Document

# 1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

**Response:** 7.74

# 1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
23	23	23	23	23

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	View Document

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

Response: 33.25

#### 1.3.3.1 Number of students undertaking project work/field work / internships

Response: 265

File Description	Document
List of programmes and number of students undertaking project work/field work//internships	View Document
Any additional information	View Document

#### 1.4 Feedback System

1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2) Teachers 3) Employers 4) Alumni

**Response:** A. All of the above

File Description	Document
Any additional information (Upload)	<u>View Document</u>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	View Document
URL for stakeholder feedback report	View Document

#### 1.4.2 Feedback process of the Institution may be classified as follows: Options:

- 1. Feedback collected, analysed and action taken and feedback available on website
- 2. Feedback collected, analysed and action has been taken
- 3. Feedback collected and analysed
- 4. Feedback collected
- 5. Feedback not collected

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Upload any additional information	<u>View Document</u>
URL for feedback report	View Document

### **Criterion 2 - Teaching-learning and Evaluation**

#### 2.1 Student Enrollment and Profile

#### 2.1.1 Average Enrolment percentage (Average of last five years)

Response: 52.54

#### 2.1.1.1 Number of students admitted year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
254	173	260	297	336

#### 2.1.1.2 Number of sanctioned seats year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
423	423	552	552	552

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

# 2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

**Response:** 69.34

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

2020-21	2019-20	2018-19	2017-18	2016-17
160	171	258	297	334

File Description	Document
Average percentage of seats filled against seats reserved	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 and organises special Programmes for advanced learners and slow learners

#### **Response:**

Examinations result and technical knowledge of the students are the very much important aspects for the best placement of the college. Result is improved by giving better attention to the slow learners. First hour test per day and three Periodical tests per semester are conducted to the students of all the branches. From the results of the previous semester exam and the Internal Assessment Tests, the students are segregated to the slow learners from the advanced learners. Students who secure pass marks in all the subjects in the university exams are considered as advanced learners, rest of them are slow learners.

#### **Programmes for Advanced Learners:**

The following programmes are conducted for advanced learners to make them engaged in many activities for improving their technical and soft skills.

- The advanced learners are guided to refer text books prescribed by Anna University for their studies.
- They are advised to do mini projects and participate in the paper/project presentations conducted by other institutions.
- Advanced learners are also involved in clearing the doubts of slow learners.
- They are also trained in the following areas as per their interest for the betterment of placements, competitive examinations and higher studies.
- Communication skills in English
- Basic computer programming
- Aptitude skills
- Leadership exposure and professional skill development
- Software oriented skills
- Coaching for GATE examination and Higher studies
- Department oriented skill developments for placements
- Club activities
- The advanced learners are also guided to go through the refereed journals to know the current technologies in their specific areas
- Faculties handling different courses interact with students in clearing their doubts and applying their knowledge and skill to practical problems.
- The advanced learners are also advised to undergo in-plant raining and internship programmes in the industries.
- They are advised to participate in the online learning courses like NPTEL
- In addition to academics, club, cultural and sports activities are conducted which foster leadership quality, decision making ability, team spirit, precision, analytical capability, socio-psychological

awareness etc. which make an individual an intellectually mature being. The college puts forward efforts to realize total development of the student.

#### **Programmes for Slow learners:**

- Review of their class attendance and internal test performance.
- Remedial Classes are conducted by the subject experts beyond working hours which is not a part of their time-table.
- Effective mentoring and for the welfare of the students, 20 students are allotted to a faculty mentor.
- Short form of notes in the poor performance subjects is given to them instead of learning from books
- A bridge course and a test are also conducted to the students entering in the first year and in second year lateral entry students.
- The Institution conducts the bridge courses for all the students in communicative English, mathematical foundation and computer Literacy course before the commencement of class work. This will reduce the fear and communication problems of the rural students.
- The tests are conducted regularly during the first hour and the slow learners will be trained during the last hour if they fail in the first hour test.

File Description	Document
Upload any additional information	<u>View Document</u>
Past link for additional Information	View Document

2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)		
Response: 7.38		
File Description Document		
Any additional information <u>View Document</u>		

#### 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:**

The institution supports student-centric learning through its efforts by creating a learning atmosphere which allows students to think in different way, respond and pose questions. It arranges several of experiential and participative learning activities to broaden the scope of education imparted to the students. Guest lectures and industrial visits are arranged for students to develop their interactive, collaborative and

independent learning.

#### **Experiential Learning**

Experiential learning is the method of learning through experience, and is more specifically meant as 'learning through reflection on doing'.

Hands-on training is a form of experiential learning and is useful to make the students expertise in their interested domains by improving the practical knowledge. Hands on trainings are conducted in different domains so that the students can learn and apply the concepts studied in the subjects.

More experiments are conducted in practical classes; the experiments beyond the syllabus are also conducted. These experiments will enhance the standard of the students with respect to the practical knowledge. So, the students are able to do mini project during third year and main project in the final year during their course.

Several industry visits are arranged to provide the students practical knowledge which update them with the current technology. The students undergo in-plant training in industries and present case-studies.

#### **Participative Learning**

The institute organizes different activities for students as well as promotes them to participate in various competitions held at local, national & international levels.

The activities organized by institute include Student Development Programs, Workshops, Conferences, Technical symposium and project competitions, interdisciplinary projects.

The institution has the facility of teaching aids such as Over Head Projectors, LCD projectors connected with Computers, broadband internet connectivity and Wi-Fi connectivity.

The library has the internet facility to access all the journal, e-material, e-books etc., enabling the students and faculty to keep abreast of the latest developments in their respective fields.

All the departments conduct a number of activities like seminars, debates, group discussions, and quizzes. Such activities develop stage courage, skills of expression, thinking power among the students. These events are conducted for the students every Saturday afternoon.

Co-Curricular activities like paper presentation, project presentation are organized regularly. Through these assignments that include intensive interaction and participation, students are seen to grasp concepts better and faster.

#### **Problem Solving Methods**

The Students are advised to work on real time problems by taking sponsored industrial projects and also are encouraged to read the magazines, journals, CD-ROM data bases and latest information available on the internet & in the library. Design oriented subjects enhance the problems solving capacity of the students.

Aptitude classes and the tests are conducted along with regular classes and also in the afternoon of every Saturday. Two to three assignments are given to the students on every subject in order to improve the problem solving methods. The design methods of various circuits and models/modules learned in theoretical and practical subjects will enhance the quality of problem solving ability. Students' development programmes are conducted for 3 to 4 days every semester.

File Description	Document
Upload any additional information	<u>View Document</u>
Link for additional information	<u>View Document</u>

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

#### **Response:**

ICT infusion is followed in teaching methodologies to improve learning, motivate and engage learners, promote collaboration, foster enquiry and exploration and create a new learner centered learning culture. It permits the move from reproductive model of teaching and learning to an independent, autonomous learning model that promotes initiation, creativity and critical thinking with independent research. Learners are expected to collect, select, analyze, organize, extend, transform and present knowledge using ICT in authentic and active learning paradigm. The Institute has 90 Mbps leased line with 591 computers connected through LAN and Wi-Fi. Class rooms are equipped with LCD projectors.

Faculties utilize three types of ICT tools such as

- **1. Generic tools for learning:** Starting from productivity tools to simulation & modeling to access, extend, transform and share information e.g. Licensed and open source software for lab and Projects.
- **2. Content-based resources:** to access a vast source of educational resources that effectively can be integrated with the curriculum objectives e.g NPTEL-SWAYAM. DELNET is available in the library for faculty and students to search for the various books and journals available in the library.
- **3. Interactive instructional courseware:** Self-paced learning materials e.g Google Class Room LMS, Video Lecture, Course material in website, YouTube channel. etc. The entire faculty prepares the lecture notes referring the standard books pertaining to the subject. These lecture notes are uploaded in the college website for students 'reference. In this manner students are aware of the topics their faculty is taking/ would be taking in the next class, and thus can prepare well in advance before actually the faculty takes that topic and gets their queries clarified by the faculty. Online lecture notes also help the students, who missed the class due to some reason, to be updated with the lectures

Teaching methodologies like Flipped Classroom, assignments and Internal Assessment Test question papers, Subject wise are compiled by faculty members and are made available on website. Practical conduction is carried out through various licensed and open source Simulation Software. These platforms

are very useful during the lockdown period and can be summarized as

Activity	Platform	
Interactive Classes	Google Meet, Google Class Room	
Video Lectures	Google Class Room, Youtube	
Laboratories, Project Works	Virtual Lab, Google Meet	
Webinars and Conference	Google Meet	
Assignments and Internal Assessment Test	Google Class Room	

The semester examinations also have been conducted by the University through online mode. The question papers have been collected by the college though web portal and sent to the students through Google Class room. The answer papers have been scanned and sent through the same Google Class room by the students.

Number of teachers using ICT for handling the classes effectively during the academic year 2020-21

Number of teachers	Number of	ICT tools and	resources	Number of ICT	Number
using ICT (LMS, e-	teachers on roll	available		enabled classrooms	classroon
Resources)					
107		LCD Projector, Wired (LAN), Wireless Network (LAN), Wireless Network (LAN), Wireless Network (LAN), Wight Speed Computers, Digital Microsoft Power Point, March (Language Meet, Google Cland)	ork (Wi- Internet, Library, Youtube	- , ,	05

File Description	Document
Upload any additional information	<u>View Document</u>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View Document

# 2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Response: 13.74

### 2.3.3.1 Number of mentors

Response: 58

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	View Document
mentor/mentee ratio	View Document
Circulars pertaining to assigning mentors to mentees	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 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document

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

Response: 21.71

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

2020-21	2019-20	2018-19	2017-18	2016-17
26	25	29	27	18

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	View Document
Any additional information	View Document

### 2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 7.54

### 2.4.3.1 Total experience of full-time teachers

Response: 814

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document
Any additional information	View Document

### 2.5 Evaluation Process and Reforms

### 2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

### **Response:**

#### **Internal Assessment Tests:**

• Internal assessment marks are awarded to the students as per the university norms. For each subject, the maximum marks are 100. Out of 100 marks,

Internal Assessment marks : 20

External Marks : 80

- Three Internal Assessment Tests for **Theoretical courses** each carrying 100 marks are conducted during the semester by the college. The total marks obtained in all the tests put together out of 300, are proportionately reduced for 20 marks and rounded to the nearest integer.
- The internal assessment marks for the **Laboratory courses** is awarded as follows: 75 marks shall be awarded for successful completion of all the experiments and 25 marks for the model exams. The total mark shall be reduced to 20 and rounded to the nearest integer
- In this academic year (2020-2021) assessment tests were carried out in MCQ pattern through online.

• As per the instruction by Anna University, the descriptive type exams have been conducted through on line. The question papers prepared by faculties are sent to the students through Google class room. The students after completing the exam scan the answer scripts and upload the scanned copy in the same Google class room.

### **To Ensure Transparency:**

- The procedure for awarding internal assessment marks is available in university regulations in the Anna University website. The same information is displayed in the notice board of all the departments.
- Three Internal assessment tests (Periodical Tests) are conducted as per the schedule published by Anna University. The circular for the test portion, question pattern and exam schedule are sent to all the class rooms and also displayed in all the department notice boards.
- The answer scripts are evaluated within two days from the date of conduct of the exam. Then the evaluated answer scripts are distributed to the respective students to know their marks. If there is any deviation in awarding marks, it will be immediately clarified and rectified.
- The internal assessment test marks and the attendance of the students are entered in Anna University web portal by the concerned faculty in-charges and the students can access this information through the students' web portal. So the students can come to know their internal assessment marks of every periodical test.
- After entering the third internal assessment test marks, the average of three periodical test marks is reduced to 20 marks for each subject. So, the students will come to know their internal assessment marks for each subject through students' web portal, before they appear for University semester examinations.

#### **Internal Marks Assessment:**

• Continuous evaluation of student performance is carried out in laboratories as well as in class rooms. The tools used for continuous evaluation of student performance are as follows:

S.No	Tool	Mode	Frequency		
1	Periodical test	ON Line/ Physical	3 per semester		
2	Laboratory Experiment	Physical	Weekly once		
3	Assignment	ON Line/ Physical	3 per semester		
4.	Attendance	ON Line / Manual (Posted	in4 per semester		
		University Web portal)			
5	Model practical Examination	Physical	1 per semester		
6	Tutorials	Physical	As per curriculum		

File Description	Document
Any additional information	<u>View Document</u>
Link for additional information	View Document

### 2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, timebound and efficient

### **Response:**

- In order to have a transparent system for examination related grievances, internal and model examinations are conducted by the institution exam cell. The exams are conducted based on the academic calendar. The dates, portions, Time duration all are informed to the student well before the commencement of the Internal Assessment tests.
- Timetable for the examinations and hall allotment are displayed in the notice boards well in advance.

### 1. For grievances before Exam

• For grievances like non-issuance of hall ticket, correction in name, the students can apply to the Principal. Subsequently, Principal forwards the applications to the Examination Cell for necessary action

### 1. For grievances during examinations

- Any discrepancy/doubt in the question paper reported by student during the Internal Assessment Test is communicated to the faculty concerned.
- Students are motivated not to indulge in any type of malpractices. If any student is found to involve in malpractice, then his/her answer booklet is handed over to the exam cell with a report from the hall invigilator. Then a fresh answer booklet is provided to that student and the candidate is allowed to write that examination. Then disciplinary actions are taken on that particular student based on the suggestions provided by the discipline committee.

### 1. For grievances after examinations

- If a student couldn't attend the internal tests and model exams when he/she represents the institution in any event (on duty), owing to medical grounds or any valid reason, that student will be allowed to write the retest to earn internal assessment marks.
- The answer scripts are evaluated within two days from the date of conduct of the exam. Then the evaluated answer scripts are distributed to the respective students to know their marks. If any grievance is raised by the student, it is resolved by the faculty and the necessary correction in marks is done immediately.
- Any discrepancy in the University exam question paper reported by student is communicated to University after examination.
- The difficulty faced by the students in MCQ pattern online exams have been reported by the parents to the Principal. The Principal has sent the letter to the Controller of Examinations

Page 40/122 22-08-2022 11:15:05

- immediately to take necessary action for the difficulties faced by the students during the online examinations. Due to many issues and complaints received from the students, parents and many colleges, the University has conducted the re-examinations for all the students who failed in MCQ pattern online examinations.
- Students can apply for re-evaluation of their answer scripts within a week from the declaration of results if they are not satisfied with their results. The results of re-evaluation will be announced as per the university norms.
- A student can apply for challenge evaluation within a week after the announcement of the revaluation results. If the student wins the challenge university favors students with proper award of marks and the challenging evaluation fee is refunded to the students.
- This mechanism provides complaint box, class committee meeting, counseling hour, transparent, time bound and efficient dealing of examination related grievances of the students.

File Description	Document
Any additional information	View Document

### 2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

#### **Response:**

The details of Program Outcomes, Program Educational Objectives, Program Specific Outcomes and Course Outcomes for all the programs and the mechanism of communication are explained hereunder.

- Program Outcomes (POs) as given by the NBA is displayed in the prominent places in the HOD and Faculty rooms of all the departments, laboratories and also in the website.
- Program Specific Outcomes (PSOs) are written for each program after thorough discussions and deliberations with stakeholders. The PSOs are also displayed in the prominent places.
- Course Outcomes (COs) are written for each course in every program after discussion amongst the course handling faculty & subject expert. The COs are kept in the course file & uploaded in the respective department website.

- The IQAC reviews the Course Outcomes (COs). The COs are agreed upon by the faculty of the program and should drive towards the POs and PSOs.
- Each Course Outcome is mapped to Program Outcomes in terms of relevance. Three levels of relevance based on degree of correlation are used. The levels of correlation are 1 for low, 2 for medium and 3 for high correlation.
- The contribution of course to each PO is expressed in terms of average relevance of COs mapped to that particular PO. Similarly the value computed for all the courses including first year courses shall be entered for the corresponding PO and PSOs.
- Awareness about POs/PSOs & COs is made to students by faculty at the beginning of the semester besides displaying them in the respective departments, and on the college website.
- Course outcomes are communicated to the students through Periodical Test question papers and Lab Manuals. The Course outcomes and CO-PO mapping for each subject prepared by the Faculty concerned are displayed in the notice boards available in class rooms. The students are aware of the course outcomes for each subject and will come to know the mapping of course outcomes with Programme Outcomes.
- The Program outcomes, Course outcomes and CO-PO mapping for each subject are given in the Faculty Log Book.
- The Program outcomes, Program Educational Objectives, Program Specific Outcomes Course Outcomes and CO-PO mapping for each subject are given in the Course files.
- The COs corresponding to each question are mentioned in the Periodical Test Question paper.
- For each programme offered in the department, Programme Educational Objectives (PEOs) and Programme Outcomes (POs) have been formulated. For each course offered in a particular programme, Course Outcomes (COs) are defined.

Places of Disseminations of Program Outcomes, Program Educational Objectives, Program Specific

### **Outcomes and Course Outcomes**

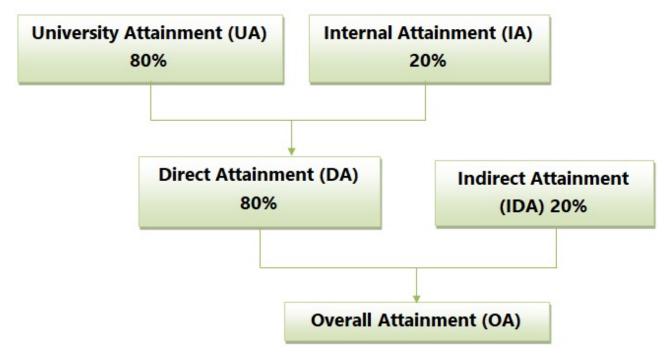
S.No	POs/PEOs/PSOs/COs	Places of Dissemination	
1.	POs/PEOs/PSOs	HOD and Faculty Cabins	
2.	POs/PEOs/PSOs	Departmental Notice Board	
3.	POs/PEOs/PSOs	Departmental Laboratories	
4.	POs/PEOs/PSOs	College Website	
5.	COs	Class Rooms	
6.	POs/PEOs/PSOs/COs	Course files	
7.	POs/PSOs/COs/ CO-PO Mapping	Log books	
8.	COs corresponding to the questions	Internal Assessment Question Papers	

	_				
File Description	Document				
Upload COs for all Programmes (exemplars from Glossary)	View Document				
Upload any additional information	<u>View Document</u>				
Past link for Additional information	<u>View Document</u>				

### 2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

### **Response:**

### **Process Flow Chart for Course Outcome Attainment**



### **Rubrics for Course Outcome Attainment**

The CO assessment for each course is done by individual faculties and assessed by the course coordinator

at the end of the semester. The assessment process has two following tools.

- o Direct Tool
- Indirect Tool

### **Direct Tool:**

The direct tools for theory courses are described as below:

- Internal Assessment Marks
- University Examination

The direct tools for laboratory courses are described as below:

- Internal Assessment Marks
- University Examination

### **Indirect Tool:**

The indirect tool for Course Outcome assessment is described as below:

• Course Outcome Survey

At the end of the semester, the feedback to assess the CO is obtained from the students for each course.

#### **Evaluation Procedure:**

### **Theory Courses**

#### **Direct Tool Internal Test**

- Class average of the students for each test is calculated and target is set just above the class average.
- The attainment level and target levels of each course are fixed as follows:

Attainment Level = 1, if 60% of students secured more than 70%

Attainment Level = 2, if 70% of students secured more than 70%

Attainment Level = 3, if 80% of students secured more than 70%

### **Direct Tool – University Examination (2017 Regulation)**

• The attainment level and target levels of each course are fixed as follows:

Attainment Level = 1, if 50% of students secured B more than B grade

Attainment Level = 2, if 60% of students secured B more than B grade

Attainment Level = 3, if 70% of students secured B more than B grade

### **Indirect Tool – Course Outcome Survey**

• The attainment level and target levels of each course are fixed as follows:

Attainment Level = 1, if the course outcome attainment is more than 60%

Attainment Level = 2, if the course outcome attainment is more than 70%

Attainment Level = 3, if the course outcome attainment is more than 80%

### **Overall CO attainment**

- Internal Direct attainment
- Direct attainment = (0.8 X University Examination Attainment Level) + (0.2 X Internal Direct Attainment)
- Overall Attainment = (0.8 X Direct Attainment) + (0.2 X Indirect Attainment)

#### Note:

• Exit and Alumni survey on POs are taken from Final and Alumni Students to calculate Indirect PO Attainment.

#### OVER ALL ATTAINMENT WITH PO MAPPING

PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO	09

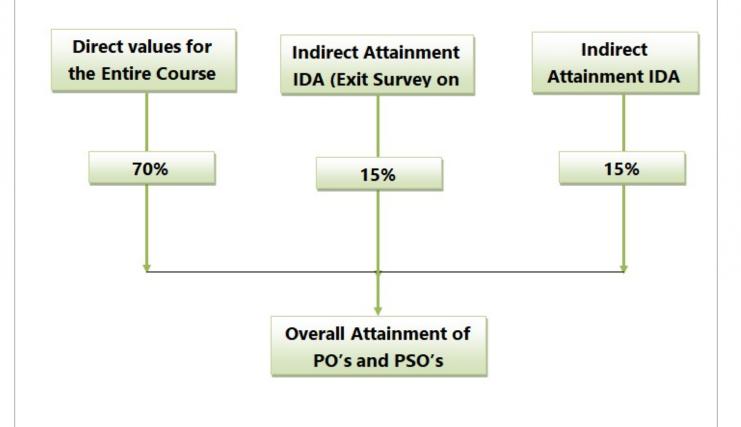
nttainment NOTE:									
ttainmant									
Final PO	3	3	2	2	1	2	2	3	
	_								
ME6602/ ME313	3	3	2	2		2	2	3	
CO (12/1) (F212)		2			1				1

If PO = 3, 1 X Overall attainment (OA)

If PO =2, 0.667 X Overall attainment (OA)

If PO =1, 0.33 X Overall attainment (OA)

### PROCESS FLOW DIAGRAM FOR THE OVERALL PO AND PSO ATTAINMENT



File Description	Document	
Upload any additional information	View Document	

Page 46/122 22-08-2022 11:15:05

### 2.6.3 Average pass percentage of Students during last five years

**Response:** 88.12

### 2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
264	296	305	333	434

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

2020-21	2019-20	2018-19	2017-18	2016-17
265	311	379	425	499

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Upload any additional information	<u>View Document</u>
Paste link for the annual report	View Document

### 2.7 Student Satisfaction Survey

### 2.7.1 Online student satisfaction survey regarding teaching learning process

**Response:** 3.99

File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document
Upload any additional information	View Document

### Criterion 3 - Research, Innovations and Extension

### 3.1 Resource Mobilization for Research

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

Response: 51.44

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	14.667	28.160	8.61	0

File Description	Document
List of endowments / projects with details of grants	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document
Any additional information	View Document

### 3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 13.89

### 3.1.2.1 Number of teachers recognized as research guides

Response: 15

 File Description
 Document

 Institutional data in prescribed format
 View Document

 Any additional information
 View Document

### 3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 23.33

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	2	4	1	0

### 3.1.3.2 Number of departments offering academic programes

2020-21	2019-20	2018-19	2017-18	2016-17
6	6	6	6	6

File Description	Document	
Supporting document from Funding Agency	<u>View Document</u>	
List of research projects and funding details	View Document	

### 3.2 Innovation Ecosystem

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

#### **Response:**

### ENTREPRENEURSHIP DEVELOPMENT CELL

Entrepreneurship Development Cell of our college was established in 2014 with the AICTE grant of Rs.4.5 lakhs for the purpose of enhancing entrepreneurship awareness among the student communities..

### **Photography Club of SAEC**

Photography Club is a blend of individuals who want to capture and make beauty. The club was inaugurated in the year 2003. The club provides opportunities for each student to realize the artist to color their dreams into reality within themselves.

### **Computer Society of India Student Chapter**

It with 128 students was first inaugurated on 20-02-2008. As an Educational Institution with Membership Number: I00899 became CSI certified on 01-04-2008.

### **ICT Academy**

Our College became an associate member of ICT Academy during 2009. Various programs has been conducted for faculty members through faculty development programs.

#### **ELITE CLUB**

Elite Club was established in the year 2011 by the English Department with the high motive to enhance the students' interpersonal skills. Competitions were conducted to prove the student's in built talents

#### **Environment club**

The Environment club was inaugurated on 12/09/2008. The main objective of the club is to create awareness on various activities such as clean campus , tree plantation ,ban of plastic etc.,.The club conducts competition such as Essay writing, Drawing to bring about the importance of sustainable world on their presentation .The club encourages all the students and faculty members of are college for planting tree samplings

### Morgan's Maths Club (MMC)

In the year 2009 Morgan's Maths Club (MMC) swith the motto "We Everest not Ever rest "was inaugurated. Every year MMC conducted programs like Code Breaker, Amend, Quiz, Puzzles and Model making.

### **Quality Improvement Cell (QIC)**

Quality Improvement Cell (QIC) is established in our college on 22.10.2013 with the guidance of Directorate of Technical Education, Tamilnadu and Anna University, Chennai to improve the teaching-learning process, English communication skills and self-learning interest of faculty and students

### The Institution of Engineers (India) Students Chapter

This Club motive to spread awareness regarding practical application and field knowledge in students of engineering department. It organizes "Engineer's Day" on 15th September of every year.

#### **IETE Students Chapter**

This club has membership strength of 102 students. Plans are on the anvil to conduct more number of technical programmes for the benefit of students and faculty members.

### **ISTE Students Chapter**

It was started in the year 2008 aiming to assist and contribute in the production and development of top quality professional engineers and technocrats.

### **Renewable Energy Club**

It was formed on 20 August 2004, to celebrate Rajiv Gandhi renewable energy day with 120 student members with 20 staff members and faculty of all the departments

### **Parent Teachers Association (PTA)**

To redress the grievances of the parents and students, every year, we conduct parents and teachers Association Meeting. Large number of parents attended these meetings and expressed their views and suggestions

### **Literary and Fine Arts Club**

The main objective of the Literary Fine Arts Club is to encourage the students in various literary and fine arts activities.

File Description	Document
Upload any additional information	<u>View Document</u>

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

### **Response:** 15

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

2020-21	2019-20	2018-19	2017-18	2016-17
4	7	2	1	1

File Description	Document
Report of the event	<u>View Document</u>
List of workshops/seminars during last 5 years	View Document

#### 3.3 Research Publications and Awards

### 3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

#### **Response:** 1.8

### 3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years

Response: 27

Page 51/122

### 3.3.1.2 Number of teachers recognized as guides during the last five years

Response: 15

File Description	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	<u>View Document</u>
URL to the research page on HEI website	View Document

### 3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 1.24

### 3.3.2.1 Number of research papers in the Journals notified on UGC website during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
29	53	11	14	41

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

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

Response: 0.49

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

2020-21	2019-20	2018-19	2017-18	2016-17
8	5	9	26	11

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

### 3.4 Extension Activities

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

#### **Response:**

**National Service Scheme (NSS)** 

The NSS Unit of Syed ammal Engineering College of Engineering, Ramanathapuram, organized different societal activities. These activities are conducted in the coordination with the NSS unit of Madurai Anna University. The college has very vibrant NSS unit having 100 students from various departments. It is monitored by NSS Program Officer and Departmental faculty coordinators. The activities are undertaken by the students like Rural Development, Health Checkup, Blood Donation, Help to needy, Poor and Old people, Tree Plantation, Environment Awareness, Village Development and Awareness of Swaccha Bharat Abhiyan, Health Awareness, women safety, gender equality, etc, every year. The unit is approved under government scheme. Promotion of health awareness and Yoga is regular activity of the college. Regular health awareness programmes are undertaken for faculty and students. The social

outreach programs includes awareness programs such as Gram Swachhta Abhiyan (to clean the village), Water Conservation, Computer Literacy, Blood Donation Camps, Educating Rural populace, awareness against the Plastic Bag and Coastal Cleanig. Tree plantation one of the outreach program undertaken by our students. They planted saplings in our college campus and in nearby areas by organizing tree plantation camps. This kind of activities educate our students and public of this region for conserving our environment as green as possible

#### **Rotaract Club**

The Saec Rotaract Club has been installed by Parent club Rotary Club of Ramnad . This Club

has many industrialists as its members. This gives the club to work in close collaboration with Industry on various social projects. The Rotaract Club ensures that the students finds themselves as responsible individual of the society and contribute towards various issues in the country. Tree plantation organized by Rotaract Club is one of the outreach program undertaken by our students. They planted over 1000 saplings in our college campus and in nearby areas by

Page 53/122 22-08-2022 11:15:05

organizing tree plantation camps. This kind of activities educate our students and public of this region for conserving our environment as green as possibleThe club ensures to inculcate a account ability within the student. The various projects we undertake are as follows:

Blood Donation Camp	
Seminar on Government Job opp	ortunities
• social responsibility and child ab	use awareness
Blood donation camp	
Tree Plantation	
Road Safety Programme	
Dengue Awarness Camp	
Road Safety Programe	
Costal Cleaning	
Blood Donation Camp	
Blood Donation Camp	
Tree Plantation	
Costal Cleaning	
Blood Donation Camp	
Blood Bonation Camp	
	Youth Red Cross
	Our college YRC Club comes under the
	YRC Cell of Anna University, Chennai The
	YRC club regularly arranges Blood
	donation camps in association with
	Dr.E.M. Abdullah Blood Donors' Club
	Also, the volunteers donate Blood to the
	needy people under emergency situations in
	and around the Ramanathapuram distric
	and they donate the cloths and other
	necessary materials during the vacation
	timings to the orphanages. The RRC
	arranges the awareness programmes or
	HIV-AIDS every year with the
	Collaboration of YRC and NSS.

File Description	Document
Upload any additional information	View Document

### 3.4.2 Number of awards and recognitions received for extension activities from government/government recognised bodies during the last five years

Page 54/122 22-08-2022 11:15:05

### Response: 0

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

File Description	Document
Number of awards for extension activities in last 5	<u>View Document</u>
year	

### 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 28

# 3.4.3.1 Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., yearwise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
3	5	4	10	6

File Description	Document
Reports of the event organized	<u>View Document</u>
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document

### 3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 38.4

3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
93	401	300	1029	566

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

### 3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship per year

Response: 185

3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
46	94	28	9	8

File Description	Document
e-copies of related Document	View Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document

### 3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 21

xesponse. 21

### 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

2020-21	2019-20	2018-19	2017-18	2016-17
1	2	4	2	12

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



### **Criterion 4 - Infrastructure and Learning Resources**

### 4.1 Physical Facilities

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

### **Response:**

The institution policies for creating and enhancing the infrastructure facilities are framed primarily for facilitating teaching - learning process, following the norms and the guidelines of the AICTE and Anna University. Based on the details of addition in intake, new courses and change in regulation, the enhancement in laboratory equipment, built-up area, and computer facilities are created well in advance for the effective teaching and learning process, well equipped laboratories, ventilated class rooms, auditorium, library, hostel for boys and girls, gymnasium, power backup and computing facility with internet.

The institution has developed the following infrastructure for the benefit of student community.

- · Industry collaborative laboratories
- · Additional laboratory equipments beyond the syllabus
- · New Product development through innovation center

#### **Features at SAEC**

- · SAEC provides positive learning atmosphere with ICT enabled class rooms and well equipped laboratories.
- · Facilitate research through University recognized research centers available in Four departments.
- · Additional space established exclusively for students counseling, group discussion, mock interview, online training and evaluation.
- · The institute offers adequate amenities like RO Mineral Water canteen, transport, gymnasium, playgrounds and stationery store etc.
- · Auditorium can accommodate 3000 audiences with good acoustics and audio-visual facilities.
- · Ambient study hall for hostel students.
- · Wi-Fi facility at hostel with 100Mbps range

Page 58/122 22-08-2022 11:15:06

· 24x7 power supply to the entire campus is made available through High Tension electric supply with two 225kVA transformers ably supported by four backup captive generators of 140 kVA,62.5 KVA,50 KVA,7.5 KVA,

#### Curricular

The institute is endowed with excellent physical infrastructural facilities to support the teaching-learning process. All the Departments have separate self-contained structures. The institute has spacious seminar/conference halls, adequate number of classrooms, well-equipped laboratories, cabins for staff, Faculty and HoDs.

The details of the infrastructural facilities are given below:

S.No	Category	Availability	
Academic Purpose			
1	Class rooms	38 rooms	
2	Tutorial rooms	1	
3	Laboratories	26	
4	Drawing Hall	1	
5	Workshop	7	
6	Seminar hall	5	
7	Central Library	1	
Administrative Purpose			
8	Chairman Room	1	
9	Principal Room	1	
10	Board Room	1	
11	Placement office	1	
12	Exam Control office	1	
13	Cabin for HODs	6	
14	Maintenance	7	
Additional Amenities			
15	Boys Hostel	1(124)	
16	Girls Hostel	1(47)	
17	Cafeteria		
18	Stationery cum		
	Store		
19	First aid cum sick		
	Room		
20 21	Auditorium	1 Hall	
21	Security office	1	

#### Co-curricular

SAEC encourages the faculty members and students to take part in co-curricular activities along with their regular academic commitments to keep them exposed to recent developments in the field of interest, through organizing and taking part in symposiums, workshops and peripheral activities such as NSS, YRC,Rotoract club etc.,

File Description	Document	
Upload any additional information	<u>View Document</u>	
Paste link for additional information	View Document	

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

### **Response:**

The sports area includes Indoor Stadium, Gymnasium, Pavilion and Gallery.Many students have

represented the college at zonal level, state level and national level tournaments. The Institution has a regular post of Physical Director.

Girl students are motivated to participate in various inter and intra collegiate competitions. Separate play hours are allotted to them to prove their mettle in Badminton, Throw Ball and Volley Ball .Separate selection trials are conducted for girl students to select talented players for participation in Inter Collegiate tournaments.

The college conducts cultural activities periodically and our students participate in cultural competitions conducted by other educational institutions. Girl students are given opportunities to participate both in inter and intra collegiate competitions. They actively participate in various events and bring laurels to the institution.

NSS unit of our Institute is functioning with 200 (100 Boys and 100 Girls) volunteers. Special camps such as Voter's ID Awareness Camp, Blood Donation Camp, and Medical Camps are organized periodically for the benefit of society with poor background. Apart from these camps, Awareness Programs on Environment, Tree Plantation, Healthcare and Traffic Rules are also organized.

As the cultural activities are the integral part of the study, the students are permitted to

participate in various cultural activities inside and outside the campus. It provides personal growth by learning skills, to meet new people and to pass on the cultural traditions. The Institute has, Renewable Energy Club, English Literary Club, Fine Arts Club etc., through which various

competitions like oratorical, essay writing are conducted and the students are motivated to excel their skills. Students show their hidden talent by participating in the above clubs. The students actively participated in cultural activities during the annual day function organized by the Institute every year.

SAEC encourages the students to develop their personalities through participation of, sports and the available facilities are

S. No	Category	
1	Cricket Ground & Practice Net	
2	Volley Ball court	
3	Ball Badminton court	
4	Badminton court	
5	Foot Ball ground	
6	Gymnasium	
7	Auditorium	
,		_

File Description	Document
Upload any additional information	<u>View Document</u>
Paste 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. (Data for the latest completed academic year)

Response: 70.21

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 33

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document
Upload any additional information	View Document

### 4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 9.38

### 4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
3.88	26.70	15.10	48.15	121.51

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document

### 4.2 Library as a Learning Resource

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

### **Response:**

### **Response:**

### Library:

- The entire library is automated using computer systems.
- The library is a member of DELNET and provides web access to more than 1000000 Records of books.
- Periodicals, Theses, Dissertations. It is connected to more than 2000 libraries in 33 states in India and other countries.
- Transactions are automated by using bar code reader.
- The following features can be accessed from any computer within the campus

availability of books by subject wise / author wise

- Account information like books taken and due date to returnfine amount to be paid for books not returned
- Access to the e-resources /NPTEL video lectures
- Library Automation: All the data relating to the Library is computerized and barcoding has been introduced.
- OPAC: An OPAC (Online Public Access Catalogue) has been created and it is also available via LAN inside campus.
- e-Journals: Subscribes to J-GATE, IEEE, Elsevier
- Library Website: Library information is available on Institute Website.
- E-journals, E-books and NPTEL Resources through LAN connectivity.
- Total number of computers for public access: 20 computers are available for public access in the Digital library
- Internet bandwidth/speed: Internet Band Width in the library is 32 MBPS.
- Participation in Resource sharing networks/consortia (like Inflibnet): DELNET

S.No	Name of the ILMS software	Nature of automation Version (fully or	Year
	o general c	partially)	
1	"Flair-ERMS v7.0".	Fully v7.0	2006

File Description	Document	
Upload any additional information	View Document	
Paste link for Additional Information	View Document	

### 4.2.2 The institution has subscription for the following e-resources

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books
- 5. Databases
- 6. Remote access to e-resources

**Response:** A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Details of subscriptions like e-journals, e- ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	View Document

### 4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 15.82

### 4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
13.64	9.9	14.73	25.22	15.63

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	View Document
Audited statements of accounts	View Document

### 4.2.4 Percentage per day usage of library by teachers and students ( foot falls and login data for online access) during the latest completed academic year

Response: 27.51

4.2.4.1 Number of teachers and students using library per day over last one year

Response: 249

File Description	Document	
Details of library usage by teachers and students	<u>View Document</u>	

### 4.3 IT Infrastructure

### 4.3.1 Institution frequently updates its IT facilities including Wi-Fi

### **Response:**

Syed Ammal Engineering College has very good IT facility and it updates its IT infrastructure periodically. Totally 591 computer systems are available in the campus as standalone and as client-server systems (as Linux server, Data base servers, File server etc.). The institute has the state of art, well-furnished computer laboratories with 562 computers exclusively available for the students.

With extended star topology, all the computer systems in the computer laboratories and in other places are inter-connected through un-manageable 1 Gbps D-Link and Digisol switches. For knowledge enrichment through the online/web contents our college has very good internet connectivity of speed above 50Mbps with Airtel Lease Line. Since all the computers in the campus connected to the LAN through Cat 6 UTP cable and optical fiber cable as a backbone, internet is accessible for all the computers.

The institute has a language laboratory with software for communication, student console and audio/video materials to develop the communication skills for both the faculty and students.

24/7 internet facility is available to the faculty and student laptops through 21 Wi-Fi outdoor access points spread across the college and hostels. These are equipped with En-genius long-range access points, Tenda long-range access points and Airgrid. These Wi-Fi hotspots provide service to students as well as to faculty community for their personal laptops for computing, communication and presentation requirements.

Open-source squid cache proxy is use as both the proxy server and as the firewall for the access control. Also the institute has CR50iNG - 10.6.3 RC-1 for the security purpose. As well as surveillance cameras are installed at strategic locations of the campus for safety and security purpose.

File Description	Document	
Paste link for additional information	View Document	

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

### **Response:** 1.35

File Description	Document	
Upload any additional information	<u>View Document</u>	
Student – computer ratio	View Document	

### 4.3.3 Bandwidth of internet connection in the Institution

**Response:** A. ?50 MBPS

File Description	Document
Upload any additional Information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

### 4.4 Maintenance of Campus Infrastructure

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

Response: 7.21

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

2020-21	2019-20	2018-19	2017-18	2016-17
10.10	12.25	21.31	30.56	80.07

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
Audited statements of accounts	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:**

With the help of the Planning Committee, Syed Ammal Engineering College fulfil the institution's emerging needs by providing enough physical infrastructure and continuously update facilities in order to offer, maintain, and use physical, academic, and support facilities.

### **Established Systems and Procedures:**

• The Principal interacts with the Planning Committee and submits a report regarding physical,

- academic and support facilities to the Governing Body for getting approval and implementation.
- The HODs, faculty, non-teaching staff, and other service personnel are charged with the upkeep of the facilities under their supervision.
- They later report to the Principal for infrastructure maintenance if they needed.
- The physical, academic, and support facilities are audited and inventoried on an annual basis for assessment and evaluation.

### **Maintenance of Physical Facilities**

- The institution has an auditorium which is adequately used for conducting various programs like symposium, Seminars, conferences, convocations, etc.,
- The institution has a separate team of staff members, plumbers, carpenters, and electricians to maintain the infrastructure.
- The main building and physical infrastructures such as the power supply, carpentry, painting, and so on, of the classrooms and the entire campus are maintained on a regular basis throughout the year, and major repair works are completed during summer vacation.
- The college has a well-maintained generator system to ensure that power is available at all times.
- Technical requirements and other infrastructure facilities are maintained on a regular basis by a separate electrical and technical maintenance team.
- Fire extinguishers and First Aid Kits are maintained on a routine basis and are refilled before their expiry dates.
- Each department has a sufficient housekeeping staff for general cleaning of classrooms, labs, auditoriums, seminar halls, playgrounds, restrooms, and roads etc.,
- The college offers transportation to the students and faculty members. The transportation committee has been formed to address and resolve transportation challenges.
- There are sufficient parking facilities for two-wheelers and four-wheelers.
- For safety reasons, sufficient security personnel have been assigned. CCTV cameras have been installed in strategic locations for the safety Ness of staff and students.

#### **Maintenance of Academic facilities**

#### **Classrooms:**

- Academic facilities such as classrooms and seminar halls are checked and maintained by Members of the technical team on a regular basis.
- The required classroom facilities are provided by the respective departments, and any repair or damage is identified immediately.
- Furniture and classroom equipment are cleaned and maintained on a regular basis.

### **Laboratory Equipment:**

- The stock register is kept on each department to keep track of the chemicals, glassware, and other laboratory equipment.
- Each departmental laboratory has lab assistant and lab attendants for the proper maintenance of the laboratories.
- For any kind of maintenance or repair, the laboratory staff in-charge is informed to report to the

- Head of the Department, and she/he forwards it to the Principal and the repair work is carried out by the concerned service person
- In the case of any maintenance is required, the instruments and equipment are serviced by the suppliers from whom they were purchased.
- A separate maintenance record is kept with the details of maintenance entries, such as the name of the instrument, date, and the repair description.
- First aid box and fire extinguisher are provided wherever necessary.

### **Sports:**

- To develop the necessary sports skills, the college offers various sports facilities to the students such as necessary sports equipment, courts, grounds, etc., which is well utilized by the students and staff.
- The playground is cleaned and all the courts are marked before the start of the academic year.
- Sports facilities like gymnasium, indoor and outdoor are provided and maintained by physical education personnel.
- Stock verification of the sports equipment is conducted at the beginning of the academic year.

### Library:

- The working hours of the library is from 8:55am to 5.00pm.
- All the books in the library are arranged according to their classification. The Library support staff members help in maintaining the books and the other infrastructure in the library.
- Students are allowed inside the library only after ensuring their valid identity card.
- Books are issued only on their identity card. Students are instructed to check the books while borrowing and they will be responsible for damage at the time of return.
- Books are to be returned on or before the due date stamped, if they returned after the due date, fine will be charged for the delayed period. If the books are lost, and then the students shall replace the same edition or the latest edition of the book.
- The students can access the reference books in the reference section.
- A regular stock verification process is carried out by the separate staff members. A file is maintained, which contains the stock verification reports achieved at distinct intervals.
- Physical verification of the library stock is the manner carried out every academic year. It gives the overall picture of the available books in the library.
- On request from each department, a list of required books are prepared and procured for the next academic year.
- There is a library committee which allows in guiding the library for powerful offerings. The library committee meets at regular durations for selection of books.
- The departmental library is taken care of by the staff in-charge of the library in each department and the support staff.

### **Computers:**

- The college has an adequate number of computers. Computers are maintained by the internal faculty members.
- Each computer laboratory has a technical staff, who ensures proper handling of computers.

- All relevant softwares, such as browsers, Microsoft Office, lab software, and antivirus software, are installed and maintained by each department. All laboratories are maintained on a regular basis.
- The responsible lab programmers and system administrator manage minor technical issues that arise with computers.
- Power backup is implemented on the main server and accessories.
- The log book keeps track of how information and communication technology is used for teaching and learning.
- Students are taught to properly observe standard operating procedures when using systems in order to avoid system failure due to incorrect use.

File Description	Document	
Upload any additional information	<u>View Document</u>	
Paste link for additional information	<u>View Document</u>	

### **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 last five years

Response: 72.01

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
528	642	829	1011	1253

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	View Document
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	<u>View Document</u>

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 42.13

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
509	488	483	408	363

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	View Document

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

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

**Response:** A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Any additional information	View Document
Link to Institutional website	View Document

### 5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 24.79

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

2020-21	2019-20	2018-19	2017-18	2016-17
215	250	319	217	423

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

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

**Response:** A. All of the above

File Description	Document
Upload any additional information	View 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

### **5.2 Student Progression**

### 5.2.1 Average percentage of placement of outgoing students during the last five years

**Response:** 68.78

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

2020-21	2019-20	2018-19	2017-18	2016-17
211	244	273	251	273

File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years (Data Template)	View Document

### 5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 22.64

### 5.2.2.1 Number of outgoing student progression to higher education during last five years

Page 72/122 22-08-2022 11:15:06

Response: 60	
File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education (Data Template)	View Document

5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 40

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	1	1

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	1	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 (Data Template)	View Document
Any additional information	View Document

**5.3 Student Participation and Activities** 

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural

activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

Response: 10

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	1	3	3	3

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

5.3.2 Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

#### **Response:**

Students' participation in Academic Committees

#### **Class Committee:**

A class committee consists of a chairperson, class advisor, subject teachers, and student representatives. The class committee meeting is held thrice a semester. Student members are nominated based on their learning abilities like advanced & slow learners, gender, hosteller, day scholar, scholarship holders, etc. During the Class committee, meeting students express their feedback regarding academic and administrative matters.

Students' participation in Administrative Committees

#### **Students associations:**

Students association is formed in departments under the guidance of the HOD as the President. Office bearers meet once a month to plan and carry out the activities. They conduct symposiums, seminars, workshops, and conferences every year.

#### **Hostel Committees**

The hostel committee comprises the chief warden, warden, and student representatives. The meeting is held twice a semester. Committee decides the menu for the mess. Students can express their suggestions/ideas during the meeting.

### **Sports Committee:**

The student representatives along with the physical directors and faculty members motivate the students to participate in indoor and outdoor games. The purpose of the committee is to identify the talented students on campus and coach them in their field of interest.

#### **Cultural Committee:**

The cultural committee consists of faculty advisors as head and students as members. The purpose of the committee is to identify the talented students on the campus and train them suitably. This committee meets once a year to discuss and provide various opportunities in cultural activities.

File Description	Document
Upload any additional information	<u>View Document</u>

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

Response: 22.6

### 5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
20	20	20	33	20

File Description	Document
Upload any additional information	<u>View Document</u>
Report of the event	<u>View Document</u>
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	View Document

### 5.4 Alumni Engagement

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

#### **Response:**

#### Alumni Association:

The alumnus forms the major strength of the institution. The main objective is to enroll all alumni as members of the association and facilitating the active participation of the alumnae inappropriate activities, events, and initiatives of the Institute. The alumni meet is conducted once a year, where the alumni from different branches of the undergraduate and post-graduate programs share their views and give suggestions for the betterment of their junior students & institution/ department. The alumni meet is hosted by the management generously and the alumni are honored with mementos. Such meetings are mutually beneficial for the Institution and the alumni. This provides an opportunity for the alumni to meet their friends and act as a bridge for the faculty to share their experiences, knowledge, and insights. The alumni visit the institution to deliver Guest lectures, Juries for competitions organized through various professional societies, and seminars for the students in their areas of expertise and motivate the young minds. Successful

entrepreneurs from the alumnus are invited to talk about their success stories at various occasions of the Institute. The alumni also help the final year students of the various streams of engineering to get their project placements and a summer internship in their companies or to assist them to get it through their reference. They also assist the students for placement in public and private sectors and the regular alumni association meetings pave the way for the successful placements of the students.

Mentorship: Alumni can play an active role in voluntary programs like mentoring students in their areas of expertise. To utilize the rich experiences of old students of the college for their benefit. To assist the students in securing suitable jobs.

Placements: The alumni network of a college is one of the biggest sources of placement opportunities for students. Alumni can help students get placed at their respective organizations. Job opportunities are provided by alumni in their companies.

File Description	Document
Upload any additional information	<u>View Document</u>

#### **5.4.2** Alumni contribution during the last five years (INR in lakhs)

**Response:** A. ? 5 Lakhs

Page 76/122 22-08-2022 11:15:06

File Description	Document
Upload any additional information	<u>View Document</u>

### Criterion 6 - Governance, Leadership and Management

### 6.1 Institutional Vision and Leadership

# 6.1.1 The governance of the institution is reflective of and in tune with the vision and mission of the institution

#### **Response:**

#### **VISION**

"To be an Institute of eminence and to evolve disciplined and globally competent engineers and technocrats."

#### **MISSION**

"Generating an enabling environment for academic excellence through quality work. Moulding rural students into professionally competent and intellectually proficient employable force through curricular, co-curricular and extracurricular activities. Creating globally talented human resources with ethical outlook and moral values, for the larger benefits of the society".

### The nature of governance, perspective plans and participation of the teachers in the decision making bodies.

Syed Ammal Engineering College— the precursor institution of the Syed Ammal Trust -, all with an overarching humanitarian and social focus to uplift the educational standards and wellbeing of this rural region.

Conceived and executed in 1998 with a far-sighted vision to transform the socio-economic profile of the region by Dr. E.M. Abdullah, the doyen of medical fraternity of yesteryears, the college eponymously takes its name from the cherished memory of his gifted mother, the late Syed Ammal. He initiated the Syed Ammal trust in memory of his mother. Syed Ammal Engineering College is headed by our beloved correspondent Dr.Chinnadurai Abdullah.

In 2017-2018, he became the governor of Rotary District of 3212 due to his divergent thinking and his service mind. He also has mission to eradicate the life threatening disease Polio.He has been recognized as one of the Top Doctors in the year 2019 by Tamil Nadu Medical Council and received the award from the Governor of Tamil Nadu.

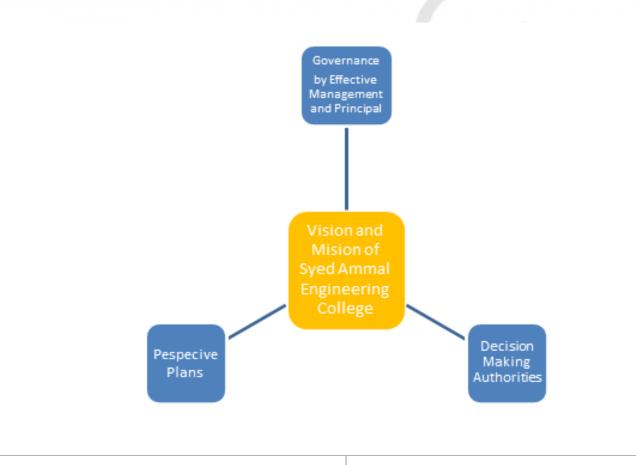
Governance is the key activity that connects between the management, staff, students and the community. We support modern governance and proper administration and believe these should be carried out in a way that actively acknowledges diversity, that is respectful of identity and serious belief and that reflects balance. The major Administrative bodies are the Syed Ammal Trust and the Governing Council.

The academic activity of the institute is planned by the College Academic Committee for which, Principal is the Chairman and all heads of the departments and Senior Administrative Staff are members.

Page 78/122 22-08-2022 11:15:06

The Committee meetings are done to discuss the academic performance and to take decisions on critical academic matters. This committee is the principal policy making and advisory body on all matters related to teaching, research and development programs. It is also responsible for assuring quality including academic integrity, assessment and research output.

For redressal of grievances and complaints, the college shall adhere to the following: Grievances, if any, may be presented before the officials - Principal/ HODs/. There should be a sincere effort from the part of the members to find solutions for the problems. All matters requiring the intervention of higher authorities should be presented in person and in writing. The grievance committee members and called upon for action planning. The committee objectively and with due respect to the institutional and academic goals, looks into the grievances and takes appropriate action to remedy the situation.



File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

# 6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management

#### **Response:**

The institution practices decentralization and participative management

Page 79/122 22-08-2022 11:15:06

#### **Response:**

Syed Ammal Engineering College functions with an efficient decentralized administration that has an absolute transparency in all the processes and programmes.

#### **Decentralization in working**

- The Various committees have been designed in our college in order to redress the problems and grievances of the students.
- For every committee, a senior faculty member is designated as a convener and a faculty from each department acts as a member of the committee.
- The convener has the responsibility to convene the meeting as frequent as possible among the members to discuss the issues focused to the responsibilities assigned to the concerned committee.
- Based on the nature of the problems arose, the necessary remedial actions will be taken by the committee concerned.
- If the remedial action requires attention of the Principal and the Management, then it will be immediately brought to the notice of them for necessary action.

## The list of various committees to decentralize the academic and administrative activities is given below.

- 1. AICTE-Approval and Anna University Affiliation Committee
- 2. Anti-Ragging Cell
- 3. Academic Council
- 4. IQAC Cell
- 5. Boys & Girls Hostel Committee
- 6. Transport Committee
- 7. ISO Committee
- 8. Purchase Committee
- 9. Maintenance Committee(Power Supply, Generator Maintenance, A/C Seminar Hall Maintenance and Audio Visual arrangement)
- 10. Academic Calender Committee
- 11. Women Harrassment Redressel Cell
- 12. Renewable Energy sources Committee
- 13. ISTE Chapter
- 14. ICTACT Chapter
- 15. IEEE Chapter
- 16. CSI Chapter
- 17.NSS Cell
- 18. IE Chapter
- 19. AU-OIC Cell
- 20. Entrepreneur and Development cell
- 21. YRC and Blood Club
- 22. IETE Chapter

The case study for the preparation of Academic Planner

The Academic Calendar is prepared and published at the beginning of every Semester.

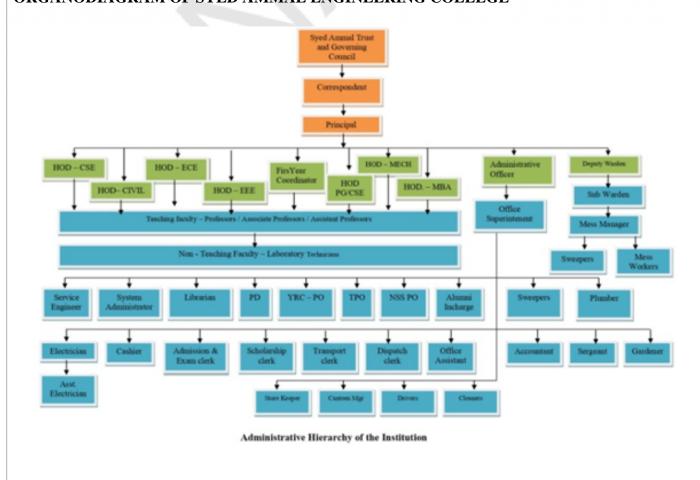
The Convener of this committee conducts meeting in the presence of the Principal with all HOD's, Placement & Training officer, Librarian and Physical Director and discuss about the schedule of the academic events. Then the committee finalizes the schedule with the approval of all HOD's followed by the Principal. The number of working days is decided with respect to the schedule given by the Anna University for each semester.

The Academic Calendar includes various information's like,

- 1.Re-opening date for every Semester
- 2. Working days / Internal Test / Model exam dates
- 3. Schedule for Symposium/National Conference
- 4. Guest Lectures
- 5. Industrial Visits
- 6. Internships & Implant training
- 7. Placement Training
- 8. FDPs / Workshops / Conferences
- 9. IQAC Meetings
- 10. Institution Functions Sports day, Annual day,
- 11. Cultural and Graduation Day.

The prepared academic extract of every semester is approved by the Principal Correspondent. After approval, permission is granted for the committees concerned for the smooth planning of the scheduled activities. Every year, all the events will be conducted successfully as per the schedule in the academic calendar.

#### ORGANODIAGRAM OF SYED AMMAL ENGINEERING COLLEGE



Page 81/122

File Description	Document	
Upload any additional information	<u>View Document</u>	
Paste link for additional information	View Document	

### **6.2 Strategy Development and Deployment**

### 6.2.1 The institutional Strategic / Perspective plan is effectively deployed

#### **Response:**

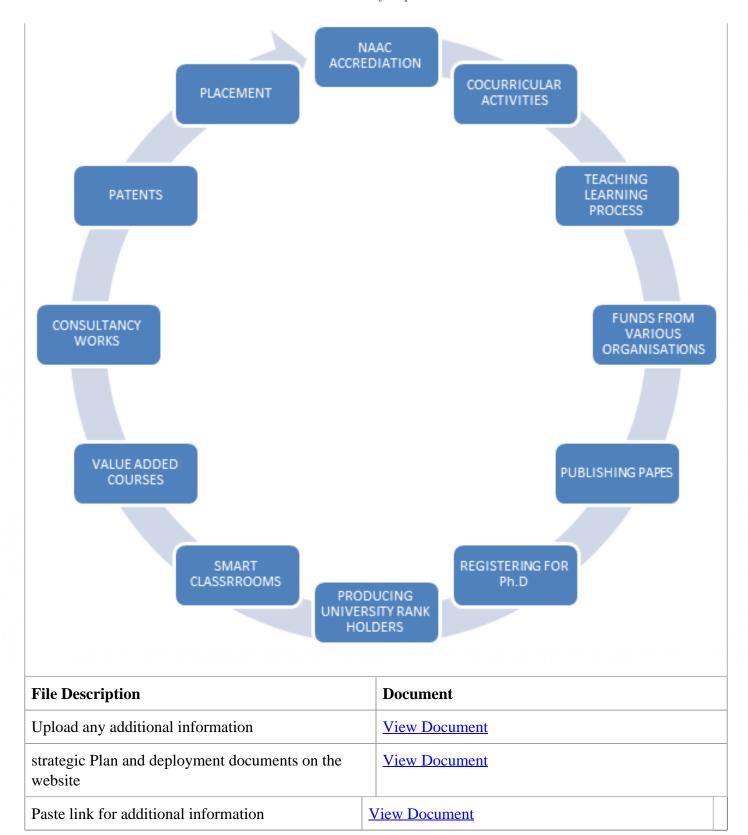
Yes. Available.

In order to enrich the quality of the programs, each department schedules their own plan. Generally after getting approval for the plans, the department works in accordance with scheduled plan for achieving the goal.

# The Institution has plans for the development of Strategic/perspective plan for the period from 2021-2026.

D1	G 1	D 1	
Plan No.		Deployment	
1	To get NAAC accreditation and	Separate Committee has bee	n fra
		Dr.S.Selvaperumal (HOD/EEF	e) for
	to become an Autonomous Institution	duty to conduct periodical revi	iew m
		the progress of NAAC certifica	ation w
		NAAC certification work is the	ne init
		college in order to obtain auton	omou
2.	To enhance the Employable skills of the students along with	_	
	encouraging the Co-curricular /extracurricular activities.	were conducted during the coll	
3	To motivate faculty members to upgrade the Teaching – Learning	Faculty members are encoura	ged to
	process.	workshops and to apply	for 1
		Committee has been framed).	
4	To get more funds from various funding agencies like ICMR	Every year, In	orc
		-	

	DRDO, DST, CSIR and AICTE to organic Conferences/Seminars/Workshops/FDP etc.	izeConferences/Seminars/Workshops/
		FDP, the faculty members are apagencies
5	To encourage more faculty members to publish papers in reput	tedIn order to motivate the faculty mer
	International/National Journals with good impact factor.	in reputed journals, separate mark ha appraisal form.
6	To motivate all the Faculty members to register Ph.D.	Faculty members are encouraged to i
7	To produce maximum number of university rank holders in ea programme	-
8	To establish more number of smart class rooms and Vid Theatres.	deoSmart class rooms are available in been taken to increase the number video theatres
9	To provide more Value added certification courses in addition the existing courses and provide coaching for competitive exams	
10	To offer more consultancy & Testing services	Civil Engineering department is doi services for government and private be implemented in other departments
11	To get more number of patents	Some departments of our college steps are being taken for getting departments too.
12	To increase the number of students in placement	Placement cell is taking necessaring industries for campus placements.



6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.	
Response:	
Response:	

Page 84/122 22-08-2022 11:15:07

Syed Ammal Engineering College is functioning with a governing body and an active administrative structure.

#### **Administrative Setup**

We SAEC, striving to provide quality and affordable education to the rural of people of this region. This would require committed faculty members and efficient administrators at the helm of affairs in order to attain the quality at every level. Keeping this in mind, power has been delegated to various authorities in order to handle the problems and needs at the grass root level. Also, the college has been certified by ISO 9001: 2015. We completely follow and adopt procedures mentioned in the ISO system of administration which encourages decentralization of the powers and every activity at all levels is well documented. This helps the management to administer the college with efficient system and maintains transparency at all levels. All these were manifested for well-being of the students till they complete their course.

#### **Governing Council**

We strongly believe that good governance is the key element that will interconnect the management, faculty members, staff, students and the society at large. We desire that it ought to be effective, efficient and prudent in carrying out its duties. We encourage and execute modern governance and appropriate administration that should be reflected in day to day activities of the college. In such a way, the governing council of the college has been framed with distinguished experts from various cross section of the society to provide valuable guidance to the Principal and management to administer the college according to the needs of the current scenario.

#### **Responsibilities of Governing Council**

- To review the academic activities of the college
- To review the administrative activities of the college
- To suggest the Principal and Management with various ideas to enhance the quality of academic and administrative system.

#### **Planning and Monitoring Board**

- The objectives of this committee are to make a planning of academic/co-curricular/extra-curricular activities for the forthcoming semester/academic year. As well, this committee will review the activities of the previous semester/year and make recommendations to the Principal/Management for further improvement.
- This committee will overview the financial viability of the college in each financial year and based on the report of the auditor, it will make suggestions /recommendations to the Principal/Management about further facilities/amenities/laboratories to be included in the forthcoming semester/year.
- The committee will also overview the Research and Development activities of the college in each year and make suggestions for further improvements in this aspect.

#### **HUMAN RESOURCE PLANNING**

The purpose of this procedure is to recruit faculty members keeping in view of the adequate faculty members/students ratio (1:20) for effective functioning of the institution and to explain the methodology to identify the training needs and to provide internal and external orientation/training for the faculty members of Syed Ammal Engineering College.

# **Governing Council**

# Planning and Monitoring Board

# **HR Policy**

File Description	Document	
Upload any additional information	View Document	
Link to Organogram of the Institution webpage	View Document	
Paste link for additional information	View Document	

#### 6.2.3 Implementation of e-governance in areas of operation

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

**Response:** A. All of the above

File Description	Document
Screen shots of user interfaces	<u>View Document</u>
ERP (Enterprise Resource Planning) Document	<u>View Document</u>
Details of implementation of e-governance in areas of operation, Administration etc	View Document
Any 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:**

#### **Welfare Schemes**

Our college enormously supports our faculty members and motivates them abundantly to perform well in all academic endeavours. Our college management provides many benefits to both teaching and non teaching staff members magnanimously. Faculty Members are eligible for the following incentives and rewards, based on their performance, contribution and years of service at the Institution.

- 1. For getting pass mark in NPTEL courses, they will be rewarded Rs. 1000 cash award.
- 2. For getting silver medal in NPTEL courses, they will be rewarded Rs. 2000 cash award.
- 3. For getting gold medal in NPTEL courses, they will be rewarded Rs. 3000 cash award.

Our management generously help the faculty members to pursue their higher education and based on their qualification, they will be benefited with good salary as mentioned below.

- 1. Faculties undergoing Full-time, higher Education (Ph.D/ME/M.TECH etc.) –50% Salary against 5 Years Service Agreement on completion of degree.
- 2. Faculties undergoing Part-time, higher Education (Ph.D/ME/M.TECH Etc.) –100% Salary against 3 Years Service Agreement on completion of degree.

Our college whole heartedly contributes the huge amount for the betterment of the faculty as follows

- Supporting staff members are provided with free computing skill programs.
- Faculty members/staff members undergoing part-time study can have flexi-timing and on-duties.
- Maternity leave on full pay may be granted to a woman faculty member/ staff member for period not exceeding 90 days.
- The college encourages its faculty members to undertake department wise R&D activities along with students and other faculty members.
- The college encourages the faculty members to undertake AICTE/DST/CSIR/IEI sponsored projects for the benefits of fellow teachers and students.
- The college encourages its faculty members to organise AICTE/DST/CSIR/IEI/Anna University funded seminars and workshops for the benefits of fellow teachers and students.
- Producing good results by the faculty members has been considered as a credit that can be added in their Faculty self appraisal form.
- Our faculty members are availed with free transport facilities.
- Summer and winter vacation leaves can be availed by the faculty members.
- Our Management provides tuition fees concession for children of faculty members studying in our college.
- Our college provides life insurance to the staff community.
- Our college offers 24 hours medical services in order to handle the emergency situations of the faculty and the students.

#### **EPF** benefits

Our college provides EPF to all employees who come under the employees provident fund legislation. They will be enrolled as members. The fund will be credited after the completion of a one year service in our college. The employees of our college lead their life satisfactorily as the management is ready to do these types of concerning of the faculty.

File Description	Document	
Upload any additional information	View Document	
Paste link for additional information	<u>View Document</u>	

# 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: 34.08

# 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

2020-21	2019-20	2018-19	2017-18	2016-17
34	60	41	31	24

File Description	Document
Upload any additional information	View Document
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	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: 12.6

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

2020-21	2019-20	2018-19	2017-18	2016-17
10	12	14	15	12

File Description	Document
Upload any additional information	View Document
Reports of Academic Staff College or similar centers	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course ).

Response: 57.44

# 6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
61	74	66	74	58

File Description	Document
Upload any additional information	View Document
IQAC report summary	View Document
Details of teachers attending professional development programmes during the last five years	View Document

#### 6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

#### **Response:**

The Faculty Self Evaluation (FSE) helps to motivate the faculty and support them in understanding the changing needs of students as well as the society. All faculty members are insisted to fill the prescribed Proforma for self-appraisal. FSE system encourages the faculty members to provide excellent performance in teaching —learning and research activities. The institution has faculty self evaluation system for the

Assessment of teaching and non-teaching staff. The Appraisal report is based on the Annual performance of the faculty and that is based on their academic, research and other curricular activities. The views of the employee filled in the prescribed proforma are reviewed by HOD's and Principal. The overall report is further reviewed by the chairman of the governing body and the governing body has the authority to take decisions based on the report. The records of the self appraisal will be kept confidential.

The faculty self evaluation report reflects the continuous improvement of the individuals for ensuring the accomplishments of the overall organisational mission and vision. An effective and energetic performance of the employee plays a crucial role in managing the organisation in an efficient manner. The institution has designed a proforma to evaluate the performance of the faculty as mentioned below:

- 1. Teaching, Learning and Evaluation related activities
- 2. Research Publications and Academic Contributions
- 3. Professional and Personal Development related activities

At the end of each academic year, the data pertaining to the above stated categories are collected from each faculty member. Based on the data collected, Academic Performance Indices (API) scores are calculated for each of the above mentioned categories. The Principal, in consultation with senior Professors fix certain minimum API scores to be achieved by the faculty members in the three categories. These scores are obtained for the award of career advancements and needed training to faculty members and for the promotion to next higher position in the institution level. Further, at the end of each semester, the institution conducts the feedback sessions to the students for each of the courses attended by them. The feedback forms in the form of questionnaire are collected to get the information about the teacher and different aspects pertaining to the teaching process. A team consisting of the Principal, Head of the Departments go through the feedback forms that are collected from the students and suggest most suitable and useful measures to improve the teaching-learning process in the institution and lead the institution to reach the level of the centre of excellence.

File Description	Document
Upload any additional information	View Document

### **6.4 Financial Management and Resource Mobilization**

#### 6.4.1 Institution conducts internal and external financial audits regularly

#### **Response:**

Monthly regular account has been verified and submitted by the audit assistant Mr.K.R.K. Nagarajan and an external audit is directly conducted during the closing of every financial year. No big findings / objections have been made so far. Any minor contradictions pointed out by the external audit team are immediately rectified and necessary steps are taken to avoid repetition of such errors in future. The main key aspect of the audit is Budgeting for optimum utilization of finance, including mobilization of resources. Planning and allocation of financial resources are done only by following

established procedures and processes.

Syed Ammal Engineering College is a self-financing institution. The fund of this institution is generated through the fees paid by the students. In addition, Faculty members of this institution have received funds from different funding agencies like AICTE, IEEE, ISTE etc. To escalate research and laboratory facilities are made through these funding agencies. The institute sharply monitors the effective and efficient utilization of financial resources for the academic processes and infrastructure development. The Institutional budget is prepared by Principal every year through collecting the proposed budget from different departments and functional heads. Recurring and non-recurring expenditures are taken into consideration.

Correspondingly, all the administrative heads, academic heads and conveners of different cells are requested to submit the requirement for the financial year.

All the major financial decisions are monitored by the Institute's governing Body council. Major financial transactions are analyzed and verified by the governing body under different heads like

- · Research & Development
- · Training & Placement
- · Software & Internet charges
- · Library Books / Journals
- · Repair & maintenance
- · Printing & stationary
- · Equipment & Consumables
- · Furniture & Fixtures

After the final approval of budget, the purchase process is initiated by purchase committee which includes a purchase officer, all head of departments and administrative officer. After due analysations of different quotations the confirmations of the quotations are fixed after the negotiations. The payments are released after delivery of the respective goods it is done as per the terms and conditions mentioned in the Purchase order. All transactions have been maintained through bills and vouchers. The bill payments are passed after testing & verification of items. Only authorized person can operate the transaction through the bank. Respective faculty member will be testing the purchased suitable equipment/machinery with correct specification have been purchased. That purchased item will be included in the stock register of the department and the bill along with the register goes for permission of payment. The entire process of the procurement of the material is monitored by the Purchase committee and the Principal at the institute level. Following the procurement the maintenance is carried out as per the instructions and regulations. Financial audit is conducted by chartered accountant every financial year to verify the compliance.

File Description	Document
Upload any additional information	View Document

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

#### Response: 0

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document

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

#### **Response:**

An appropriate system has been followed by the Syed Ammal Engineering College for the usage of available financial resources in an effective and well-organized way. The Governing Body constantly monitors the proper utilization of allocated funds as per the need based on which the decision related to finance was made. Each department was allocated for the fund during the preparation of yearly budget. This budget is generally for the requirement or up-gradations. The Administrative officer will monitor the financial matters intimately. Based on the financial need, the respective departments will be receiving the grant through a proper requisition. For example, in case of any requirement, the details of the requirement of the equipments, maintenance and expansion of infrastructures etc are prepared by the concerned heads and through the proper requisition followed by the approval further procedures for purchase are adopted. During the end of the financial year, a statement of accounts containing details of income and expenditure, including budgetary is made ready by means of an external audit.

#### Admission fee

Admissions of students are made through Anna University Counseling (TNEA) under Government Quota (50%) and Management seats are admitted through Consortium of Self Financing Professional Colleges in Tamil Nadu (50%) with the collection of fees as prescribed by the Tamil Nadu Government higher education regulation.

#### **Grants from Government Organizations**

Grants through proposals from various Government Organizations such as AICTE, ISTE, IEEE, etc are cautiously utilized to meet the recurring and non recurring cost of institutions.

#### **Trust Contributions**

Syed Ammal Engineering College is functioning under the Syed Ammal Trust which contribute fund to develop construction of buildings, Procurement of equipments, furniture's and consumables such as books, chemicals and glassware's. Scholarship is also provided for the meritorious, poor and needy students by the trust

#### **Optimal Utilization**

The Institution purchases transport vehicles (buses) according to student strength and a reasonable transport charges collected from the students.

#### **Recurring Expenses:**

Fees collected from students are utilized for the salary to Teaching faculty and non teaching staff, academic activities and for the other expenses.

#### Research and project activities:

Grants received from Government bodies like AICTE, IEEE are effectively utilized to conduct seminars, workshops, FDP, etc., In addition, Institution management contributes from their budget to conduct technical symposiums.

In order to cover the research excellence among academicians, many research projects are encouraged for students and faculty to enhance the recent socio-economic strategies. Similarly our institution strives hard to receive grants from Government Organizations for Research and Development through proposals.

#### Renewable energy resources

Our institution strives to be an eco-friendly environment hence has installed Solar power plant generating 160 KW.

File Description	Document
Upload any 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:**

Describe two practices institutionalized as a result of IQAC initiatives within a maximum of 500 words

#### 1. Feedback System

IQAC has created an online student feedback form to collect information from students about their courses of study, learning tools availability, teaching methodology, and so on. This online feedback system has been introduced and implemented as a quality initiative to make the student feedback system more effective and successful, as it includes all the students for assessing and improving the quality of teaching and learning process. Students' feedback for every subject that they taught is given to all teachers on the flair database so that they can develop and enhance their teaching. However, the teachers are unaware of the students' names.

In the student feedback system, the following points have been verified

- 1. Preparation by the faculty members for the concerned subjects
- 2. Clarity and audibility on the subject taught
- 3. Visibility of the content written on the board
- 4. Interest in teaching by the faculty members
- 5. Interactions and clarifying doubts about the subject
- 6. Completion of syllabus before the prescribed time
- 7. Concern about student progress and their continuous improvement
- 8. Controlling the class and maintaining their discipline
- 9. Understanding lectures given by the faculty members
- 10. Teaching moral and ethical conduct

With the above points, the questionnaire was developed. The feedback from the students received and score by the particular faculty member for the particular subject has been received. With this score, the positive and negative points of the faculty members were identified. The same was informed to the faculty members personally. Also, suggestions will be provided for their further improvement. The faculty members who are scoring high marks will be appreciated.

### 1. Academic Audit through IQAC:

Academic and Administrative Audit is a peer review process that includes a self-study and also a site visit by experts from both inside and outside the institution. An academic audit's objective is to support programmes, departments, and the organization to review their quality processes and standards towards predetermined criteria, and to encourage activities to develop, assure, and continuously enhance the quality of the entire system in place, including curricular and co-curricular programmes and activities, and also infrastructure and supporting programs. Quality has become an important requirement in today's digital world. Higher education is a well known tool for social and personal improvement. Leading educational institutions around the world have made it a priority to engage in ongoing and continuous self-evaluation and up-gradation.

Hence, every year the college uses IQAC to conduct an academic audit for each department and various

committees in order to improve and sustain the standard of education. The committee gathers academic plans at the start of each academic session, including publications, extension activities, cooperation, creative and best practices, assignments, ICT-based activities etc., The committee monitored academic progress and reviewed plans submitted by departments. Corrective actions were made based on the committees audit report. Following the implementation of such an academic audit, it was noticed that all departments and committees have been continuously strengthening their curricular, co-curricular, and extracurricular results.

File Description	Document	
Upload any additional information	View Document	
Paste link for additional information	<u>View Document</u>	

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 and recorded the incremental improvement in various activities ( For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives )

#### **Response:**

### ACADEMIC REVIEW THROUGH CLASS COMMITTEE MEETING AND STUDENT COUNSELING:

The institute's teaching and learning process is student-centered and results-oriented, taking into account the needs of a range of learners. The students' learning levels are determined and taken into account when creating learning materials and evaluating them. Class committee meeting in our college is conducted as per the regulation of Anna University. After reopening of the college, within 15 days the first meeting will be conducted. Continued with the second after periodical test I. The third periodical meeting between 2nd and the 3rd periodicals. Chairperson will be the faculty who is one not going to that class. Around 6 students will be selected. One from hostel and the remaining from the same class with students of slow, average and high in studies along with equal number of girls and boys. All the points are freely discussed and the chair person consolidates the points and submits the same to the Head of the Department. These points are usually discussed in the HODs meeting and the suggestions will be carried out for verifications.

In all institutions of higher education, establishing a "students counseling system" is required. The system should address all of a student's common concerns, including anxiety, stress, and fear of failure, as well as homesickness and other academic issues. The system should involve students, teachers and parents, and should be target oriented and interactive. The student counseling system should bridge both communicative and formal gaps between the students and the institution. When necessary; the system may employ the services of a trained psychologist. A batch of 20 students will be allotted to each counselor trained to act as a guardian throughout the year. They will address their intellectual and emotional needs,

and provide them with career guidance. Teacher counselors can collaborate with hostel wardens in order to get information on students regarding their personal details, behavior patterns and academic records, for future measures and corrective actions.

#### **DEPARTMENT ADVISORY COMMITTEE**

- The Department Advisory Committee is chaired by the HOD, who receives the Department Advisory Committee's report and keeps track of the program's progress.
- The committee creates and recommends new or altered programme goals and objectives.
- The committee also examines and analyses the discrepancy between the curriculum and industry requirements, providing required feedback or recommendations.
- NPTEL, Spoken tutorial, FDP, STTP / Guest lecturers monitoring
- Verification of Faculty Dairy for the following:
  - a. Attendance Entry,
  - b. Class and Series Test Marks.
  - c. Syllabus Coverage,
  - d. Identification of Slow Learners and above average performers
  - e. HOD Authentication.
- Verification of Assessment & Tutorial Sheets.
- Checking Course plan and delivery
- Submission of report to the IQAC in the prescribed format.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

#### 6.5.3 Quality assurance initiatives of the institution include:

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

**Response:** A. All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document
Paste web link of Annual reports of Institution	View Document



### **Criterion 7 - Institutional Values and Best Practices**

### 7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

#### **Response:**

#### Gender equity & sensitization in co-curricular activities

The following program organized by last five years

- Sports and Games competitions are conducted for the girls regularly.
- Various club activities like cultural programs, International Women's Day, Pongal Celebration, Yoga, Entrepreneurship program are conducted for the girls
- International Women's Day is celebrated every year in our college with the aim of enhancing the interpersonal and life skills of the Girl students.
- Pongal festival celebration is conducted every year in our campus with enthusiasm. For girls, Speech competition, Essay Writing competitions, Rangoli competitions are arranged to bring forth their innovative ideas.
- Various programs are organized to motivate the students to exhibit their talents in event management as well as extracurricular activities. Chief Guest are experts from different fields, invited to deliver speech about women related issues and give their insights that are essential for women empowerment and also to face the challenges in this modern era.
- Women Entrepreneurs are invited as chief guests to share their experience on the various government schemes that are available for aspiring women entrepreneurs.
- Gender Sensitivity

The institution aims to groom students to be self-reliant, specialists in their chosen discipline, continuous learners, effective communicators, socially responsible, aware of their social and civic responsibilities, sensitive to gender issues with zero tolerance towards sexual harassment, women safety and security, and environmental consciousness. One of the objectives of this institution is to promote education that would be sensitive to the needs of the various sections of society with special emphasis on gender equality and gender sensitivity. Students of both the genders are given equal opportunities to grow and develop into able, responsible citizens of the future. College makes efforts to maintain gender balance among the faculty members. The college has installed closed circuit (CC) cameras to monitor the security and safety of the girl students. A suggestion box has been installed on the premises of the college to ensure redressal of grievances. Lectures on women safety are also conducted. The girl students are assured of their well-being, safety, security and mental health.

#### Institution shows gender sensitivity in providing facilities such as

• Grievance Redressal Committee (GRC): The Statutory Committee Grievance Redressal Committee (GRC) is formed as per Clause 1 of section 23 of the AICTE Act, 1987 (52 of 1987) AICTE. The Committee has been formed in order to ensure transparency by technical institutions imparting technical education in admissions, preventing unfair practices, complaints of alleged discrimination by students of Scheduled Caste, Scheduled Tribe, OBC, Women, Minority or

- Disabled Categories, scholarship issues and sexual harassment and to provide a mechanism to innocent students and stakeholders for redressal of their grievances.
- Counselling Counselling is given for the student of 20 members per staff. The students are met personally to ask their requirement related to academic and non-academic activities. The barriers are identified and solved.
- Common Room: Separate common rooms available for female and male student. These are well established dining room for Day-scholar students. During their leisure time they will go there and take rest.

File Description	Document
Link for annual gender sensitization action plan	View Document
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	View Document

### 7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

- 1. Solar energy
- 2. Biogas plant
- 3. Wheeling to the Grid
- 4. Sensor-based energy conservation
- 5. Use of LED bulbs/ power efficient equipment

**Response:** A. 4 or All of the above

File Description	Document
Geotagged Photographs	<u>View Document</u>
Any other relevant information	<u>View Document</u>
Any other relevant information	View Document

# 7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- · Hazardous chemicals and radioactive waste management

#### **Response:**

#### SOLID WASTE MANAGEMENT

At our Institution, solid wastes are collected by placing separate dust bins at various locations for biodegradable and Non-biodegradable waste. The garden trimmings generated from our college garden and cow dung from our cattle reared is utilized for preparing manure. They are dumped into the compost pit and manure is used for trees & the garden at our campus.

Paperless communication is followed at our institution. WhatsApp and e-mail is followed for sending information among the staff members. We also encourage staff members for utilizing one-sided papers.

#### LIQUID WASTE MANAGEMENT

Wastewater from our college canteen is collected separately and used for watering plants and trees inside our campus using truck. Wastewater from toilets are collected in the septic tanks and disposed periodically. Wastewater from our ladies hostel is treated with Sewage Treatment Plant (STP). The treated water is utilized for fodder cultivation and the sludge derived is used as manure for fodder cultivation. Sprinklers are installed in our college garden to provide controlled and judicious utilization of water.

#### BIOMEDICAL WASTE MANAGEMENT

Sanitary napkins from the ladies restroom are disposed by incinerating in the Sanitary Napkin Incinerator.

#### WASTE RECYCLING SYSTEM

The examination papers and metal scraps are collected and sent for recycling periodically by local vendors.

#### E-WASTE MANAGEMENT

Our Institute acknowledges the need to have a sustained focus on proper e-waste handling procedures and adequate disposal methodologies. Along with the hardware recycling techniques for e- waste management, we can also use cloud storage for the reduction of e- waste production. Thus we promote the concept of "Live in the Cloud" among our students. The major sources of e-wastes at our college are outdated computer monitors, printer cartridges, mouse, keyboards, etc.. These are periodically disposed back to the suppliers through buy back schemes. Refilling of the printer cartridges is done outside the college campus. We use network printer in our computer lab to reduce the number of independent printers. There is low awareness on hazards of e-waste among the general public. We actively advise the students on how to handle the e-waste so that we can maximize the recovery and minimize the waste generation.

File Description	Document
Any other relevant information	<u>View Document</u>
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Link for Geotagged photographs of the facilities	View Document

#### 7.1.4 Water conservation facilities available in the Institution:

- 1. Rain water harvesting
- 2. Borewell /Open well recharge
- 3. Construction of tanks and bunds
- 4. Waste water recycling
- 5. Maintenance of water bodies and distribution system in the campus

### **Response:** A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	<u>View Document</u>
Any other relevant information	<u>View Document</u>
Link for any other relevant information	View Document

#### 7.1.5 Green campus initiatives include:

- 1. Restricted entry of automobiles
- 2. Use of Bicycles/ Battery powered vehicles
- 3. Pedestrian Friendly pathways
- 4.Ban on use of Plastic
- 5.landscaping with trees and plants

#### **Response:** Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	<u>View Document</u>
Any other relevant documents	View Document
Link for any other relevant information	View Document

### 7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any

### awards received for such green campus initiatives:

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

**Response:** A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Certificates of the awards received	<u>View Document</u>
Any other relevant information	View Document
Link for any other relevant information	View Document

#### 7.1.7 The Institution has disabled-friendly, barrier free environment

- 1. Built environment with ramps/lifts for easy access to classrooms.
- 2. Divyangjan friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts
- 4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

**Response:** A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities

#### (within 500 words).

#### **Response:**

The Syed Ammal Engineering College is located at Ramanathapuram, in the rural surroundings of South East Tamil Nadu. The college is spread over 30 acres of lush green campus enveloped in a peaceful and beautiful environment. Over 800 students along with about 150 faculty members come from various cultural backgrounds that carry forward their rich cultural diversities. The institute conducted various socioeconomic activity programs in the district. The NSS cell of the college organized a Blood Donation Camp with a medical team from Ramanathapuram Government Head Quarters Hospital. In this event, 75 units of blood were collected from student volunteers and staff. The Syed Ammal Engineering College and Rotary Club of Ramanathapuram organized a Rally on "Awareness about Cancer Prevention and Non Usage of Tobacco Products." In this rally 200 students participated in creating awareness to people about Cancer Prevention and Non Usage of Tobacco Products. The college Entrepreneurship Development Cell (ED-Cell) organized a "Demo stall." In this event, the students with entrepreneurial development stalls created awareness of Entrepreneurship Development to students. Every year new team of office bearers to the Rotaract Club of Syed Ammal Engineering College is installed. In this event more students participate and join in Rotaract Club with an awareness to serve the society.

The Dengue Awareness Camp has been organized by our college. In this event student volunteers and staff members have participated in creating dengue prevention awareness to people. Tree plantation campaign was organized by our Correspondent Rtn. Dr. Chinnadurai Abdullah. In this event our correspondent Rtn. Dr. Chinnadurai Abdullah, our principal, and students have participated by planting more than 100 trees. Dengue Awareness Camp has been organized by our college. In this event student volunteers and staff have participated in dengue awareness to people in various villages in that district. The Blood Donation Camp has been organized by our college with the medical team from Ramanathapuram Government Head Quarters Hospital. In this event, ? units of blood were collected from our student volunteers and staff. The institute organized Awareness Programme on First Aid during Emergency Care by Dr. Gobi. In this event, 150 students participated and learned First Aid Techniques for Emergency Care during the time of any pandemic and natural disasters.

The institute conducted one day program in the name of clean India camp at Lanthai village, and Coastal Clean-up at Mandapam Camp in Ramanathapuram District, to create awareness among the people toward cleanness. In this event, students and staff have participated. The College conducted a medical camp with the help of the Indian Medical Association (IMA), Ramanathapuram. The Medical Camp was conducted for the benefit of the public, students, and staff, who participated in this event.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Link for any other relevant information	View Document

# 7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

#### **Response:**

The various activities in the institution for inculcating values for being responsible citizens as reflected in the constitution of India.

The institute takes pride in the fact that apart from preparing an academic foundation of the students community, the institute constantly works upon to develop them as better citizens of India. In this regard, the students and faculties of our college celebrate Samathuva Pongal that promotes the "Unity in diversity" of our motherland. The institute celebrates Independence Day and Republic Day with great pomp and vigour. An awareness program on National Voter's Day was conducted to bring awareness among the young people and to create an awareness of voting importance among the student community. This also created an awareness of importance of polling among the public. An awareness program on Road Safety in collaboration with Police Officers Community took initiative to bring awareness to the people about the road safety measures and made the young students community aware of the rules and regulations to avoid accidents.

The NSS unit of our college organized a Tree plantation drive and Swachh Bharat Cleaning program, which is a great initiative to increase plantation at our location and to encourage others about the importance of tree plantation. It also motivated others to involve in this act. A book fare was organized to provide a reading and learning environment in our college campus and to increase the learning culture among the students.

The faculty has organized various co- curricular activities for the propagation of the fundamental duties and rights of the Indian citizens. The Sports committee of our college conducted Yoga program as "Yoga makes life excellent" "Yoga for life" which brings forth benefits to the body and mind that keeps our body very active, tireless and good for all the age groups.

Since the last five years, the institute has strived hard with great effort to increase the level of awareness and appropriate practices among the students mainly of female students with regard to the following areas. The institute celebrates International Women's Day to make woman proud and holding banners with various slogans on encouraging female issues like children education, safety and security, realize their power, Women's rights, their liberty, obstacle for girls' education, pursuing higher studies etc., The Women's Development cell conducted the competitions on "Seminar on Glory on Feminism" to activate our girls to feel their glory. "Awareness program on Legal Rights of Women" about the harassment, domestic violence, suppression of the girl child, equal education for both children. Awareness program on "Women Health and Hygiene", "Health and Blood Donation" about the health and hygiene of girls and encouraged the girls to donate blood. "Awareness Program to Counter Human Trafficking" for their future safety and prosperity, encourage them to be confident and strong physically and mentally. "Seminar on Health and Legal Issues" to know the health tips.

The various activities in the institution for inculcating values for being responsible citizens as reflected in the constitution of India.

File Description	Document
Link for any other relevant information	View Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document

# 7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website
- 2. There is a committee to monitor adherence to the Code of Conduct
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

**Response:** A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	View Document
Code of ethics policy document	View Document
Any other relevant information	View Document

# 7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

#### **Response:**

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 pluralistic approach towards all religious 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.

1.**26th January Republic Day-** Republic Day is celebrated on January 26 to commemorate the adoption of constitution. On this day, various formal events including flag-hoisting and march-past are organized and which are followed by "constitution awareness program" in which students and

- staff members get information of their duties towards our nation and rights given to them by our constitution. By organizing such type of events institute does its share to inculcate patriotism and awareness to next generation.
- 2.**15th August Independence day** It is celebrated every year along with all other Educational institutions. It is a grand event marked with the flag hoisting by the Chief Guest and well-practiced march-past by many teams of Security Personnel. cultural activities related to independence movement are exhibited.
- 3.5th September ( Dr. Sarvpalli RadhaKrishnan Birth Anniversary)- On 5th September, we celebrate Dr. Radhakrishnan's birthday as Teacher's Day with great fervor. The students organize a program for the teachers and the Guru-Shishya parampara is celebrated.
- 4.2nd October Mahatma Gandhi Birth Anniversary.- A standout event amongst the most mainstream events in India and one of the three national occasions, Gandhi Jayanti is celebrated in our Institute on 2nd October of consistently to commemorate the birth of Mahatma Gandhi. Gandhi is famously known as the Father of our Nation, Bapu or simply Mahatma. The day is announced as a national occasion and all institutes and workplaces are closed due to this celebration. The standards of truth, peacefulness and trustworthiness are recalled and generally impressed upon the students of the institute.
- 5.15th September Engineers day (Birth Anniversary of Sir Visvesvaraya) We celebrate this day on 15th September consistently as an exceptional tribute to the best Indian Engineer Bharat Ratna Mokshagundam Visvesvaraya.
- 6. We celebrate Pongal every year in the month of January as a Harvest Festival of Tamils.

File Description	Document
Link for any other relevant information	View Document
Link for Annual report of the celebrations and commemorative events for the last five years	View Document
Link for Geotagged photographs of some of the events	View Document

#### 7.2 Best Practices

7.2.1 Describe two best practices s	uccessfully implemente	ed by the Institution	ı as per NAAC format
provided in the Manual.			

veshouse	•

**Response:** 

#### 7.2.1.1 Title of the practice

Development of Employability skills through student mentoring.

#### **Objectives of the practice:**

This practice envisions the realization of following objectives

- To actualize one of the common threads underlying the vision and mission of the college
- To contribute toward the growth and development of college
- Under graduate students frequently require the guidance and counseling through the faculty members. Which refresh their developments.
- Each faculty plays the role of mentor for nearly 10 to 20 students per semester.
- The mentors are alerted for first year engineering students usually from the department of science and humanities and II, III, IV-year students have their mentors from the respective departments. The mentors have to take care of the students till their graduation.

#### 1. The context:

Mentors can call the parents for the poor attendance/ performance of students to correct them. The preventive actions are taken and the solution would be implemented for problems to further improvements by the mentors. Each mentor has to maintain the whole data base of student throughout the year, and those details would be examined by respective HODs.

#### The practice:

The mentor has to go through the following activities.

- 1. The mentor has to do more for students benefits always
- 2. Arrange a meeting with student individually.
- 3. Constantly has to monitors, encourages and motivates the students in academic level and activities.
- 4. Advising and training the students regularly.
- 5. Mentor has to keep in touch with parents/ guardians and respond to irregularities, negative behavioural changes and interpersonal skills development of students.
- 6. Train the students for career development/professional enhancement.
- 7. Keep contact with students after their graduation.
- 8. Maintain progressive record of students.
- 9. Regular counseling to students and make the proper report for them.
- 10. The immediate action has to be taken after the grievances or suggestions given by the student's side
- 11. The concerned mentor has to maintain the record and try to refined them towards upcoming developments.

#### Problems encountered and resources required:

This was solved by effective counseling of the students and follow up measures taken with the parent's knowledge.

#### 7.2.1.2 Title of the practice:

Enrich the social responsibilities of students through club activities.

#### **Objectives**

Stimulate the students to develop their social responsibilities and to become good citizens for the welfare of the society.

#### The context:

Club: Syed Ammal institute energetically participates various club includes rotract club, eco club, and it contains into college campus the various clubs that talent exhibiting clubs like Ramanujan Morgan's math club, renewable energy club, elite English club, citizen consumer club, environment club, literary and fine arts club, photography club for the betterment of students as well as faculty members.

#### The Practice:

Intermingle with the people to expand the greenery in and around the locality. They create awareness among the people to grow trees and remove unwanted karuvelam trees.

#### Problems encountered and resources required:

It has fund deficiency and also unsatisfactory support from the people while management provides all necessary support.

#### 7.2.1.3 Title of the practice

Enrich the students through placement trainings

#### **Objectives**

This practice envisions the realization of following objectives

- To actualize one of the common threads underlying the vision and mission of the college
- To contribute toward the growth and development of college
- To realize the professional goals of the student community.
- To contribute toward the economic and social needs of the industry and society.

#### **Context**

One of the pressing challengers facing technical institutions is the economic and social relevance of their graduates in the wider constituents of society and economy. As there is an increasing trend of unemployment amongst engineering graduates it is quite, natural and expedient for engineering colleges to meet this challenge head- on. This challenge demands graduates to be reasonably proficient in their domain knowledge and at the same time are reasonably endowed with social and skills to excel in their jobs , While their domain knowledge desiderata are addressed by the academic KPIs, their relevance on employment arena is addressed through a well-structured placement training policy.

#### The practice:

The program is spread over 10 days during the academic year covering various aspects of employability skills, social skills, problem solving skills, aptitude, resume writing, GD, interview preparation, team building etc. The college has executed MOUs with Fragren Academy, Chennai for this purpose. In the

past, RIPE and SMART have been institutional partners toward this end.

#### **Evidence of success:**

The effectiveness of this intervention could be ascertained from the following statistics:

Year		dentsNo. of con mentvisited the colles placement	npaniesNo of students offered AO ge for	
2020-2021	434	12	230	
2019-2020	852	15	268	
2018- 2019	1103	16	286	
2017- 2018	1299	13	272	
2016- 2017	1519	15	285	

# Problems encountered and resources required:

During the training, it was observed, many students harbor perspectives which are at variance with their parents and teachers. As a result, their participation, in the initial stages was somewhat not as effective as it should have been.

# **During the Campus Visit:**

Some students continue to suspect the credibility and legitimacy of placement companies and as a result they do not evince the alacrity and care required of them. Thus again has been effectively addressed individually with such students, by dispelling their inhibitions.

# During the issue of AO and afterwards:

There have been instances of some students failing to turn up for work after receiving the appointment orders for various reasons like location, terms & conditions of job offer, pay etc. This has been handled smoothly by moral standing them and sensitizing them about the broader dynamic realities of the job market and the economic upheavals faced by the industry.

# 7.2.1.4 Title of the practice

Entrepreneurship Development Cell.

# **Objectives of the practice:**

The purpose of establishing ED cell is to enhance economic and social relevance of graduates in a way different from the usual and established pattern of churning out job seekers and replacing them with challenging possibilities of making job providers out of them.

practice has the following objectives:

- To foster entrepreneurial thinking amongst the graduating students.
- To make them economically and socially more useful and productive.
- To think creatively and venture out of the out of box mode to assume exciting challenges and rewarding risks.
- To contribute economically toward the development of the society and nation.
- To meet the expanding and dynamic needs and challenges of industry.
- To enhance personal and economic worth of graduating students in their minds and social interface.

#### The Context

The environment surrounding business and industry is rapidly changing and as a result business faces fierce competition and innovation is recognized as the need of the hour. The traditional knowledge – seeking information - generating model is longer tenable in the present context of flux and fluidity. Availability of job opportunities to graduates is comparatively getting scarce as against the quantity of aspirants. The fact that entrepreneurial culture and spirit has ushered in economic development and material wellbeing over the years cannot be denied. Business, which has come to occupy central place in society owes to the vision, risk taking and creative streaks of individual entrepreneurs and venture capitalists. Be it a Bill Gates or a Ambani, what emerges out of their trail is the very same creative thinking and orientation that galvanizes them in to what they are today. So it is quite natural to take serious cognizance of the entrepreneurial elephant in the (class) rooms of graduating students!

# The practice:

- Data on the number of EDPs conducted during the last five years.
- Funds received during the last 5 years.
- Ideas / proposals received and approved.

#### **Evidence of success:**

- Ideas and proposals received and approved.
- Number of entrepreneurs created.
- Number of EDPs conducted.

#### Problems encountered and resources required

- Lack of interest.
- Lack of awareness.

File Description	Document
Link for Best practices in the Institutional web site	View Document
Link for any other relevant information	View Document

# 7.3 Institutional Distinctiveness

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

Res	pon	se:

#### **Response:**

Established, way back in 1998, Syed Ammal Engineering College, unlike any of its class, derives its unique and distinct identity and image from the far-signed vision of its legendary founder Dr.E.M. Abdullah, a doyen of medical fraternity of yester years who had a far- reaching perspectives of transforming a at lagging district of the State, educationally, economically and socially. Over the years, Syed Ammal Engineering College has carved a niche for itself in the comity of institutions of its genre on the following core areas:

Co curricular attainment, honors etc..

Infrastructure, lab, sports facility and security.

**Anna University Approved Research Centres** 

Library and ED cell.

**Grants and FDPs.** 

Fee concessions for students.

Remedial class for slow leaner's.

Student feedback.

Mentoring and counseling.

Quality policy.

# Vision

To be an institute of eminence and to evolve disciplined and globally competent engineers and technocrats.

# **Sports Facility:**

The College has state of the art sports and games facility, including indoor games. Football ground, Volley ball court, Badminton, Cricket provide rich outdoor activities for the students with indoor games like Chess, Caroms, TT etc There are separate grounds for playing cricket, kabadi, football, hockey, volleyball, shuttlecock, badminton and 400 m track are available in the college for the students to strengthen their sports interests. An indoor stadium with facilities for playing volleyball, badminton and shuttlecock are available in the college campus. Separate grounds for volleyball and shuttlecock are available in the girls' hostel.

# **Security:**

The security surrounding the college is 24×7 with professional security services and CCTV gives a heft to the Institute's safety and security.

#### **Fees concessions for students:**

Every year the college offers concession in various slabs in the tuition fees for the students in admission based on merit and their scores in the qualifying exams, in addition to their economic background.

#### **Grants:**

Grantor	Head/Name	Dept	Year	Amount
	R&D Grant	CSE	2016-2017	50,000
IE				
AICTE	MODROBS	ECE	2017-2018	8,61,00
TNICCOT	Capacity Bui Training	ldingMBA	2018-2019	1,50,000
TNSCST	PRERANA	ECE	2018-2019	6 66 000
AICTE				6,66,000
AICTE	Advanced The Engineering Lab	ermalMECH	2018-2019	10,00,000
AICTE	Enhancing understanding skills students in the electrical machaboratory.	etrical cough of	2018-2019	10,00,000
TNSCST TNSCST	Solar Power E Production Oxyhydrogen (HHO cooking purpose		2019-2020	7,500
INSCSI	Cyber Security Ana of Substation Autom System	· ·	2019-2020	7,300
AICTE	EMBEDDED Net	workECE	2019-2020	14,51,765

Co	ontrol Between	
H	eterogeneous Nonlinear	
Sy	stems for Agricultural	
A	pplications	

#### INFRASTRUCTURE DISTINCTIVENES

# **Power Supply Fecility**

Power supply has been provided to the entire college two LT supplies. When there is no power supply, a 140 KVA, 7.5 KVA, 50 KVA and 62.5 KVA generators are used as stand by.

#### **Seminar Hall**

There is a well-furnished and fully acoustic air conditioned seminar hall is available in EEE block with the capacity of 400 seating to stage various events such as seminars, conferences and symposiums. In addition to that, each department has a separate seminar halls for conducting department events.

#### **Auditorium**

An indoor auditorium with the capacity of 3000 seating can be used for hosting common events such college days, sport days and graduation days etc. The same auditorium can also be used for hosting indoor games such as volley ball, shuttle cock and ball badminton.

## **Medical Center Facility**

A medical center is functioning in the college campus for providing medical relief to the students. A medical practitioner is visiting the college for this purpose. In case of any one requires advanced treatment, they will be immediately taken to the one of the trust hospitals located near to the college campus

# **Edusat Facility**

Our college has the facility of receiving lectures of eminent professors in Anna University on various subjects through educational satellites by ISRO through Anna University. By this arrangement students can strengthen their subject knowledge and they also have the feeling of being in Anna University. Our Students and Staff members regularly attend this program. It is remarkable to note that this facility is available only in few colleges in Tamilnadu.

#### **DISTINCTIVENESS IN PLACEMENT**

# **Training and Development**

## **OBJECTIVES**

To fulfill the ever growing corporate needs and expectations from the students. Training and development is becoming inevitable and the result is quite evident. Considering the fact in mind, we conduct training & development programmes not only for soft skills and aptitude skills but we also give due importance for

communication skills and technical skills development according to the latest trends and fast growing competitive world needs. As a result of out continuous efforts and good performance form the student end, our students get very good career opportunity in various corporate.

# Major functions of placement office

- Conducting Campus Interviews
- Organizing Personality Development Programs
- To establish an Entrepreneurship Development Center to transform the Job Seekers into Job-Givers
- Industry Institute-Interaction Meet
- Arranging Industrial Visits and Guest Lectures
- To invite dialogue with various corporate sectors to explore the common areas of interest to sign MOUs
- Arranging Off-campus Interviews
- Organizing the Alumni Meet.

# **OUTCOMES** (Strength of placement office)

To conduct the campus selection process and joint campus selection programs successfully to the satisfaction of the corporate and participating colleges and to conduct various corporate training programs & seminars the placement office is strengthened with the following infrastructure facilities

- Conference Hall to conduct the corporate meets, high-level meeting and discussions.
- Seminar Hall to conduct corporate training programs & seminars for both students and faculty wherein we can accommodate 100 members comfortably.
- Auditorium with the LCD, mike & speaker facilities, to conduct the campus selection and joint campus selection programs successfully.
- LAN & High speed network facility to conduct the online campus selection. S A Engineering College has a fleet of buses, the services of which can be utilized to enable the students and parents to reach our campus in time at the time of joint campus / off-campus selection process involving a number of colleges in and around the city.

#### **EVIDENCE OF SUCCESS**

1341 students were placed in 2016 to 2021batches.

File Description	Document
Link for appropriate web in the Institutional website	View Document
Link for any other relevant information	View Document

# 5. CONCLUSION

# **Additional Information:**

Our College has formed IPR Cell in January 2015, with the aim to motivate the faculty members and students to promote innovations in research and to file, publish and grant patents. The IPR Cell has filed 33 patents, out of which 22 patents have been published in the IPR Journal and 3 got granted. Our college has been selected and awarded as a Centre for Excellence during the year 2019 by the Centre for Intellectual Property Rights (CIPR), Anna University, Chennai.

Our college has been selected under the Band-Excellent category which is one among 92 institutions in India among 1438 institutions in ARIIA Ranking 2021

Good sports facilities and infrastructure for hosting events at Zonal, University and National levels. Students' association activities, mentoring, faculty appraisal, online students' feedback system. 30% of tuition fee is distributed as scholarships/ tuition fee waiver to financially weak and meritorious students. Merit based educational scholarship is being offered to all needy. Round the clock medical care is provided to students with vehicle facilities. A Data Centre with high end blade server caters the students and faculty members with academic resources like NPTEL etc., by connecting about 617 systems in the campus with OFC network. Indoor Auditorium with a seating capacity of 2500.

# **Concluding Remarks:**

The Syed Ammal Engineering College was started in the year 1998 with three UG Programmes with a total intake of 140 students and 15 faculty members. The Institution stands tall today by offering 5 UG programmes, 5 PG programmes and 3 Research programmes with a total strength of 962 students and 94 faculty members. The 25.21 acres green campus is completely encompassed by a compound wall and 102041 square meters is earmarked for Syed Ammal Engineering College. Rtn. Dr. Chinnadurai Abdullah, is the Correspondent of the institution and the member of Syed Ammal Trust. Being a Radiologist, he has numerous ambitions to bring landmark developments in the institution academically. He visits the premier institutions in the country and abroad and brings new ideas to create state of art infrastructure facilities in the campus. He involves himself in a lot of social activities. He has keen interest in sports and games. His encouragement and guidance made him to serve as key administrator in various District Sports Associations. He is always rendering wholehearted support and tireless service towards Syed Ammal Engineering College through his perennial inspiration. As per NAAC guidelines, we have completed the first step of Assessment and Accreditation. The Institutional Information for Quality Assessment (IIQA) is approved on 10/08/2021 with Track Id TNCOGN104751. It gives immense pleasure to submit Self Study Report of our Institution to NAAC, Bangalore for first cycle of accreditation. The report is an outcome of collective efforts of all staff and students. This report is prepared as per the guidelines laid down by NAAC.

# 6.ANNEXURE

#### 1.Metrics Level Deviations

Metric ID Sub Questions and Answers before and after DVV Verification

1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following

academic bodies during the last five years

- 1. Academic council/BoS of Affiliating university
- 2. Setting of question papers for UG/PG programs
- 3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
- 4. Assessment /evaluation process of the affiliating University

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

Remark: Observation accepted

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1. Number of Programmes in which CBCS / Elective course system implemented.

Answer before DVV Verification: 13 Answer after DVV Verification: 10

Remark: Edited as per document provided by HEI (Excluding PhD Programs)

1.2.2 Number of Add on /Certificate programs offered during the last five years

1.2.2.1. How many Add on /Certificate programs are offered within the last 5 years.

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
10	30	19	19	12

#### Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
12	12	12	12	12

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

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

	2020-21	2019-20	2018-19	2017-18	2016-17
--	---------	---------	---------	---------	---------

	413	1596	1059	1298	1055
	Answer A	fter DVV V	erification :		
	2020-21	2019-20	2018-19	2017-18	2016-17
	413	1596	1059	1298	1055
1.3.2	Average percen work/internship 1.3.2.1. Num work/internship	o during las	t five years ses that inc	s elude experi	
	Answer be	efore DVV V	Verification	:	
	2020-21	2019-20	2018-19	2017-18	2016-17
	59	69	75	81	80
	Answer A	fter DVV V	erification :		
	2020-21	2019-20	2018-19	2017-18	2016-17
	23	23	23	23	23
		<b>ber of stude</b> efore DVV Ve ter DVV Ve	Verification	: 862	ect work/fi
2.4.3		emic year i	n number of of full-time.  Verification	of years) ne teachers : 862	s in the sar
2.6.3	Average pass p	ercentage of	f Students	during last	five years
	2.6.3.1. <b>Num</b>		year stude	ents who pa	ssed the u
	during the last the Answer be	n <b>ve years</b> efore DVV V	Verification	:	
	2020-21	2019-20	2018-19	2017-18	2016-17
	2.6.3.2. <b>Num</b>		•	nts who ap	peared for
	wise during the	•			
	Answer be	efore DVV V	/ erification	:	

2020-21	2019-20	2018-19	2017-18	2016-17
265	311	379	425	499

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
265	311	379	425	499

- Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years
  - 3.2.2.1. Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
30	27	13	8	11

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
4	7	2	1	1

- 3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years
  - 3.3.1.1. How many Ph.Ds registered per eligible teacher within last five years

Answer before DVV Verification: 67
Answer after DVV Verification: 27

3.3.1.2. Number of teachers recognized as guides during the last five years

Answer before DVV Verification: 15 Answer after DVV Verification: 15

Remark: Observation accepted

- Number of research papers per teachers in the Journals notified on UGC website during the last five years
  - 3.3.2.1. Number of research papers in the Journals notified on UGC website during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
30	58	15	17	55

4	Answer	After	DVV	Ve	rification	:	
r							

2020-21	2019-20	2018-19	2017-18	2016-17
29	53	11	14	41

Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
5	6	9	15	8

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
3	5	4	10	6

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

3.4.4.1. Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
365	451	895	1698	1006

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
93	401	300	1029	566

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship per year

3.5.1.1. Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
61	149	49	13	8

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
46	94	28	9	8

- 4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)
  - 4.4.1.1. Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
65.66	91.23	112.09	125.83	203.07

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
10.10	12.25	21.31	30.56	80.07

Remark: Edited considering expenses on Lab. maintenance, Building maintenance, AMC charges, Generator maintenance, Water plant maintenance. Hostel maintenance & all other maintenance

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
20	20	20	33	20

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
20	20	20	33	20

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
92	146	62	43	36

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
34	60	41	31	24

- 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
  - 6.3.3.1. Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five vears

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
21	20	16	17	14

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
10	12	14	15	12

# 2.Extended Profile Deviations

ID	Extended Questions
1.2	Number of programs offered year-wise for last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
13	14	14	14	14

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
11	11	11	11	11

2.1 Number of students year-wise during last five years

2020-21   2019-20   2018-19   2017-18   2016-17
---

862	927	1175	1363	1570	
	fter DVV Ve				
2020-21	2019-20	2018-19	2017-18	2016-17	
797	927	1175	1363	1570	
Number o	f full time to	eachers yea	r-wise durir	ng the last fi	
Answer be	efore DVV V	erification:			
2020-21	2019-20	2018-19	2017-18	2016-17	
107	96	109	138	147	
Anguar Ad	fter DVV Ve	rification		1	
2020-21	2019-20	2018-19	2017-18	2016-17	
108	96	109	138	147	
	efore DVV V		2017-18	2016-17	
85	95	102	136	142	
Answer After DVV Verification:					
2020-21	2019-20	2018-19	2017-18	2016-17	
108	96	109	138	147	
B					
Total Exp	enditure ex	cluding sala	ry year-wis	e during las	
Answer be	efore DVV V	erification:			
2020-21	2019-20	2018-19	2017-18	2016-17	
172.61	326.04	432.53	502.27	934.06	
Answer At	fter DVV Ve	erification:			
2020-21	2019-20	2018-19	2017-18	2016-17	
168.72	299.34	417.43	454.12	566.14	