SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

SRI SAI RAM ENGINEERING COLLEGE

SAI LEO NAGAR, POONTHANDALAM VILLAGE, DHARKAST POST, WEST TAMBARAM 600044

www.sairam.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

January 2018

<u>1. EXECUTIVE SUMMARY</u>

1.1 INTRODUCTION

Sri Sairam Engineering College (SSEC) was established in the year 1995 by MJF.Ln.Leo Muthu, Managing Director of Leo Group of Companies as an unaided engineering college.This institution is located in a sprawling campus of about 40 acres at Sai Leo Nagar, Dharkast near Tambaram, a suburb of Chennai City. This institution, approved by the Government of Tamil Nadu and All India Council for Technical Education, is affiliated to the Anna University, Chennai.

Presently, **Shri.J.Sai Prakash Leo Muthu** as CEO and Managing Trustee of the Institution, is providing by his dynamic leadership all the encouragement and support.

The Institution commenced its functioning from the academic year 1995-96, with 178 students and 20 faculty members, offering degree programmes in Mech, EEE and ECE. Presently it has a strength of 4695 students and 367 faculty members offering 9 UG and 8 PG programmes. All the programmes, eligible for accreditation, have also been accredited by National Board of Accreditation(NBA).

SSEC graduates are placed in a diverse range of organizations. A great many students have gone for their higher studies both within India and abroad.

Our students have been performing commendably well in State and National level sports and games competitions.

Research has been given its due importance. The departments of ECE and Mechanical Engineering are Anna University-recognised "Research Centres".

SSEC has taken great strides in Engineering Education and has emerged as one of the Pioneering Institutions in the country. SSEC will continue to strive further and work towards achieving its Vision.

Vision

To emerge as a "Centre for Excellence" offering Technical Education and Research opportunities of very high standards to students, develop the total personality of the individual, and instill high levels of discipline and strive to set global standards, making our students technologically superior and ethically strong, who in turn shall contribute to the advancement of society and humankind.

Mission

We dedicate and commit ourselves to achieve, sustain and foster unmatched excellence in Technical Education. To this end, we will pursue continuous development of infrastructure and enhance state-of-the-art equipment to provide our students a technologically up-to-date and intellectually inspiring environment of learning, research, creativity, innovation and professional activity and inculcate in them ethical and moral values.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Constant encouragement and full-fledged support from the Management.
- Dedicated, well-qualified and competent faculty with research intent.
- Sprawling Campus in a serene environment with excellent infrastructure.
- Well-equipped labs.
- Effective mentoring system providing constant guidance to the student and feedback to the parent.
- Providing scope for all-round development of personality of the student through Sports, Associations and Clubs.
- Ranked at the top among the private Engineering Colleges in Chennai City.
- Cells like EDC and IEDC to instill as well as foster the spirit of innovation and entrepreneurship.
- Increased interest and effort among faculty towards research and publication in reputed journals.
- Periodic research orientations like National and International Conferences, Workshops/Seminars.
- Excellent Placement Records.
- Effective involvement of alumni in placement of out-going students.
- Support of Industries in and around Chennai.

Institutional Weakness

- Industry-Institute interaction needs improvement.
- More departments need to become "Research Centres" recognized by Anna University.
- Number of MOU's with Industries for training students, needs to be enhanced.
- More relevant online, indexed journals to be made free-downloadable under Institutional membership.

Institutional Opportunity

- Considering research projects of National Importance as well as social relevance.
- Participation of Alumni in the task of enhancing the employability of outgoing students.
- Exploring more opportunities for consultancy projects.
- Considering to initiate 'Start-ups" within the Campus itself.

Institutional Challenge

- Retaining the top position among all Engineering Colleges in the country.
- Making the research work done at the Institution suitable for industrial application and fulfill the requirement of the society.
- In this fast-growing technological era, it is becoming difficult to adjust and adapt quickly since the academic curriculum is prescribed by the affiliating Anna University.

Improving the employability of the students in the current scenario of rapidly changing technology and industrial requirements as well as policies prevailing from time to time in MNCs.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The Institution is affiliated to Anna University and the curriculum and syllabi prescribed by Anna University are strictly adhered to. Effective curriculum delivery is ensured through a process as given below:

Advance planning of academic activities Formulation of objective driven teaching plan Preparation of adequate learning materials Maintenance of course files by faculty Remedial Classes for slow learners Mentor-ward system Periodic review of teaching-learning process by the Principal Systematic examination process with despatch of reports to parents Guest lectures, seminars, industrial visits and training programmes Refresher Courses, workshops and FDPs for upgradation of faculty's skills

- 42 full time teachers have participated as members in various bodies of the universities.
- 10.02% new courses introduced .
- CBCS introduced in 9 UG programs and 8 PG programs from the academic year 2017-2018.
- 5780 students enrolled in Add-on programmes.

Efforts relevant to gender-equality, environment, human values and professional ethics:

- Equal opportunities in terms of admissions, employment, training programmes, sports activities etc.,.
- Women faculty and students are members in clubs such as WoWWW (Women of Worth, Wonder and Wise); they participate in programmes of women empowerment etc.
- Curriculum includes courses on Professional Ethics, human rights and Environmental Science .
- 88 value-added courses imparting transferable and life skills.
- 2643 students have undertaken field projects/internships.
- Structured feedback received from students, teachers, etc on design and review of syllabus.

Teaching-learning and Evaluation

- Average percentage of students from other states is 1.24%
- Average enrollment percentage is 85.85%
- Average percentage of seats filled as per the reservation policy is 98.98%
- Special programs arranged for advanced learners and slow learners after due assessment.
- Student-full time teacher ratio is 307:24
- Percentage of differently abled students on rolls is 0.09%
- Student-centric methods applied for enhancing learning experiences.
- Average percentage of teachers using ICT for effective teaching with LMS, e-learning resources etc., is 87.19%
- Each mentor on an average has approximately 13 students under his care for academic and stress related counseling.
- Smart Classrooms, IEDC cell project activities and industrial visits contribute to innovation and

creativity in teaching-learning.

- Among the sanctioned posts, 100 % are full time teachers.
- Average percentage of full time teachers with Ph.D is 12.01%
- Average teaching experience of full time teachers is 12.17 years
- Average percentage of full time teachers who received awards and recognition is 2.51%
- 3.08% of full time teachers are from other states.
- Continuous Internal Evaluation system is subject to reforms.
- Mechanism of internal assessment is transparent and robust.
- Mechanism to deal with examination-related grievances is transparent, time-bound and efficient.
- Teachers and students are made well aware of program outcomes and course outcomes.
- The Institution evaluates the attainment of these outcomes.
- Average pass percentage of students is 94.22%
- Online student satisfaction survey with regard to teaching learning process is performed.

Research, Innovations and Extension

- Grants for research projects to the extent of Rs.4,08,82,640/- sponsored by government and nongovernment sources.
- 19 faculty members recognized as research supervisors at present by various universities (5.18%)
- An average of 0.17 projects per faculty funded by government and non-government agencies. (63 Government projects and 241 Non Government Projects for total staff strength of 1769)
- The Institution has in place an ecosystem for innovation and other initiatives for creation and transfer of knowledge.
- A Research Advisory Committee consisting of The Principal, Dean (R&D) and other senior professors from various departments, guides and monitors the initiation and progress of research.
- Workshops/seminars conducted on Intellectual Property Rights and Industry-Academia innovative practices.
- The Institution has a stated code of ethics to check malpractices and plagiarism in research.
- Incentives awarded to teachers who receive state, National and International Recognition. (The Teachers of the Institution have received 85 Incentive schemes)
- 1.53 Ph.Ds awarded per teacher. (29 scholars completed Ph.D under the guidance of 19 faculty)
- 0.28 Research papers per teacher, published in UGC approved journals. (487papers / 1769 faculty)
- 120 different extension activities conducted by NSS/YRC / NCC leading to a notable impact on the community as well as participating students regarding social issues.
- 63 awards received from the government/recognized bodies.
- 602 linkages for faculty exchange, student-exchange, internship, on-the-job training and research.
- 90 functional MOU's with on-going activities with Institutions of national and international importance.

Infrastructure and Learning Resources

Adequate facilities for teaching-learning are available as given below:

- 107 classrooms
- 110 labs
- 15 seminar halls
- 2 smart classrooms

- 4 auditoria
- 2 video conferencing rooms
- 19 workshops
- 3 drawing halls
- 8 research labs
- 3 Computer Centres
- 1 Central Library.

Courts, playgrounds for various games inclusive of Cricket, Football, Basketball, Volleyball etc. as well as a track² field for athletics have been established .

Well-facilitated Gymnasium set up in the Campus.

Provision of rooms for practice of cultural activities.

67 classrooms with LCD/WIFI-LAN facilities, 10 seminar halls with ICT facilities

An average percentage of 44.33 per year of budget for infrastructure augmentation.

Library automated by Integrated Library Management System (ILMS), has a total collection of 69321

books, 157 printed journals and 5 packages of on-line journals.

An average annual expenditure per year of Rs. 29,14,088 for purchase of books and journals.

Remote access available to the e-resources in the library.

Per day usage of library by teachers and students is 9.5%.

More than 20 WiFi hotspots with extenders covering the entire college area.

IT facilities including WiFi are periodically updated.

Student-Computer ratio is 3.31.

Leased line Internet Connectivity has a bandwidth of 145 Mbps.

The average expenditure on maintenance of campus infrastructure is 36.76%.

Established systems and procedures available for maintaining and utilizing physical, academic and support facilities.

Student Support and Progression

38.08% of students per year benefitted through the scholarships from the government and 8.99\% of students per year through the scholarships from the Institution.

67.57% of students benefitted through guidance for competitive examinations and career counseling. Five agencies help in soft skill development for students enrolled each year.

Remedial_ocoaching provided for slow learners, students of tamil medium and vocational stream.

Language lab helps in improving students' communicative English.

Bridge Courses conducted in Mathematics and English .

Two agencies assist students in practising Yoga and Meditation.

Personal counselling is a core activity of every teaching staff as a mentor .

Students have been benefitted by Vocational Education and Training.

Transparent mechanism for timely redressal of student grievances.

An average of 75.88% of outgoing students get placements and 5.46% of students progress towards higher education.

An average of 72.35% of students qualify in GATE, GMAT, CAT, GRE, TOEFL etc.

More than 100 awards won for outstanding performances in Sports/cultural events at National/International levels.

Student council formed each year comprising of one student representative from each department which plans and organises activities.

A total of 66 events in sports and 74 cultural competitions organized in five years.

Alumni meet annually to share their views and give suggestions.

Alumni deliver guest lectures and seminars.

Alumni help their juniors in terms of projects, internships and placements.

Governance, Leadership and Management

- The CEO guides the administrative team to work in consonance with the Mission and Vision of the Institution.
- The Governing Council meet periodically to monitor progress and suggest strategies.
- The Principal and the HODs periodically meet to take decisions on academic matters.
- The HOD decides on the activities of the department and delegates responsibilities to the faculty.
- Staff and students permitted to give suggestions- an example of participative management.
- Steady growth of infrastructure an example of perspective/strategic plan.
- Utilisation of other teaching aids like LCD projectors etc., EDUMATE software for perusal of student progress as well as staff details examples of deployment of strategic plans.
- Projects funded by AICTE, DRDO and other private undertakings.
- Community service by NSS /YRC in adopted villages as well as Blood donation camps, Medical checkups, Awareness rallies.
- Organogram of the Institution provided.
- Effectiveness of various committees in the implementation of minutes evidenced.
- Welfare measures for teaching and non-teaching staff like cash awards, sponsorships, incentives, etc.,.
- 18.4 programmes arranged per year for professional development of staff .
- 16.64% of teachers provided with financial support for attending conferences etc.
- Performance appraisal system in place .
- Rs.93.77 Lakhs received as grants from non-governmental bodies/individuals.
- The IQAC focuses on the continuous improvement of the examination system.
- Quality of student projects improved by implementing suggestions by the IQAC .Quality Assurance Initiatives in place.
- Incremental improvements in quality listed.

Institutional Values and Best Practices

- 17 gender-equity promotion programmes organized .
- Exclusive club for sensitizing both staff and students, named as WOWWW (Women of Worth, Wonder and Wise) in which activities are organized.
- In the total power requirement of 1,56,000 units, 1,44,000 units met by renewable energy sources.
- 69.97% of lighting power met by LED bulbs.
- The issues of waste production and disposal efficiently managed.
- Bio-gas plant reduces the LPG cost in the canteen kitchen.
- Institution has a CII E-Waste Collection Centre.
- Rain-water Harvesting system in place.
- 0.94% of the total expenditure is on purely green initiatives and waste management.
- Friendly options are available for the differently-abled.

- Major initiatives taken up to address locational advantages and disadvantages.
- Code of conduct-book exists for all.
- Activities like those of NSS, YRC, NCC etc contribute in the inculcation of human values .
- 37 programmes organized to increase awareness on fundamental duties and constitutional obligations.
- Conducted activities for promotion of universal values.
- EDUMATE (Student academic process and learning management system) and the MENTORING SYSTEM the two best practices in the Institution.
- EDUMATE is a dynamic data base of faculty and students offering easy retrieval of any data.
- In MENTORING SYSTEM, students are assigned to faculty members to keep track of their progress and to counsel them periodically.
- The Institution aims to focus on futuristic demands of the society as well as the holistic development of the student.



<u>2. PROFILE</u>

2.1 BASIC INFORMATION

Name and Address of the College			
Name	SRI SAI RAM ENGINEERING COLLEGE		
Address	SAI LEO NAGAR, POONTHANDALAM VILLAGE, DHARKAST POST, WEST TAMBARAM		
City	KANCHEEPURAM		
StateTamil NaduPin600044			
		Website <u>www.sairam.edu.in</u>	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	C. V JAYAK UMAR	044-22512222	9677065557	044-4226777 9	sairam@sairam.ed u.in
Professor	J. RAJA	044-22512227	9444477858	044-2251222 9	jraja.ece@sairam.e du.in

Status of the Institution	
Institution Status	Private and Self Financing

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

Recognized Minority institution		
If it is a recognized minroity institution	No	

Establishment Details

Date of establishment of the college	30-04-1995
University to which the college is affiliated/ or v college)	which governs the college (if it is a constituent

State	University name	Document
Tamil Nadu Anna University		View Document

Details of UGC recognition			
Under Section	Date	View Document	
2f of UGC	18-08-2015	View Document	
12B of UGC			

	Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory AuthorityRecognition/App roval details Inst 			Validity in months	Remarks	
A	AICTE	View Document	30-03-2017	12	

Details of autonomy		
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	Yes	
If yes, has the College applied for availing the autonomous status?	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	SAI LEO NAGAR, POONTHANDALAM VILLAGE, DHARKAST POST, WEST TAMBARAM	Rural	39.38	162050.7

2.2 ACADEMIC INFORMATION



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,Civil Engineering	48	HSC or Equivalent	English	120	91
UG	BE,Compute r Science And Engineering	48	HSC or Equivalent	English	180	159
UG	BE,Electrical And Electronics Engineering	48	HSC or Equivalent	English	120	96
UG	BE,Electroni cs And Com munication Engineering	48	HSC or Equivalent	English	240	210
UG	BE,Electroni cs And Instr umentation Engineering	48	HSC or Equivalent	English	120	83
UG	BE,Instrume ntation And Control Engineering	48	HSC or Equivalent	English	60	38
UG	BE,Mechani cal Engineering	48	HSC or Equivalent	English	240	217
UG	BE,Producti on Engineering	48	HSC or Equivalent	English	30	20
UG	BTech,Infor mation Technology	48	HSC or Equivalent	English	120	96
PG	ME,Comput er Science And Engineering	24	BE or Equivalent	English	18	3
PG	ME,Electrica	24	BE or	English	18	2

	l And Electronics Engineering		Equivalent			
PG	ME,Electron ics And Com munication Engineering	24	BE or Equivalent	English	18	0
PG	ME,Electron ics And Com munication Engineering	24	BE or Equivalent	English	18	2
PG	ME,Electron ics And Com munication Engineering	24	BE or Equivalent	English	18	0
PG	ME,Mechani cal Engineering	24	BE or Equivalent	English	18	0
PG	ME,Informat ion Technology	24	BE or Equivalent	English	18	0
PG	MBA,Master Of Business Administrati on Programme	24	Bachelors Degree or Equivalent	English	120	81
Doctoral (Ph.D)	PhD or DPhi l,Electronics And Commu nication Engineering	36	Masters Degree or Equivalent	English	2	2
Doctoral (Ph.D)	PhD or DPhi l,Mechanical Engineering	36	Masters Degree or Equivalent	English	1	1

Position Details of Faculty & Staff in the College

				Te	aching	Faculty	7					
	Profe	Professor				Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government			1	41				59			,	265
Recruited	31	10	0	41	28	31	0	59	112	153	0	265
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				41				59	J			265
Recruited	31	10	0	41	28	31	0	59	112	153	0	265
Yet to Recruit				0				0				0
	1											

		Non-Teaching	Staff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	<			125
Recruited	37	88	0	125
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				125
Recruited	37	88	0	125
Yet to Recruit				0

Technical Staff									
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government				97					
Recruited	74	23	0	97					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				97					
Recruited	74	23	0	97					
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.	0	0	0	0	0	0	0	0	0	0		
Ph.D.	27	9	0	9	5	0	6	8	0	64		
M.Phil.	0	0	0	1	1	0	12	34	0	48		
PG	4	1	0	18	25	0	94	111	0	253		

			ŗ	Гетрог	ary Teach	ers				
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers											
Highest Qualificatio n	-			Associate Professor			Assistant Professor				
	Male	Femal	e Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0	
Ph.D.	0	0	0	0	0	0	0	0	0	0	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	0	0	0	0	0	0	0	

Details of Visting/Guest Faculties							
Number of Visiting/Guest Faculty	Male	Female	Others	Total			
engaged with the college?	2	0	0	2			

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
Doctoral (Ph.D)	Male	1	0	0	0	1
	Female	2	0	0	0	2
	Others	0	0	0	0	0
UG	Male	2586	47	0	0	2633
	Female	1812	23	0	0	1835
	Others	0	0	0	0	0
PG	Male	76	3	0	0	79
	Female	144	1	0	0	145
	Others	0	0	0	0	0

Years					
Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	70	87	99	112
	Female	66	86	88	70
	Others	0	0	0	0
ST	Male	2	2	3	3
	Female	e 0	2	1	1
	Others	0	0	0	0
OBC	Male	516	625	635	619
	Female	372	436	436	386
	Others	0	0	0	0
General	Male	139	166	187	180
	Female	2 101	122	148	157
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	e 0	0	0	0
	Others	0	0	0	0
Total		1266	1526	1597	1528

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

3. Extended Profile

3.1 Program

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

Response : 1277

Number of self-financed Programs offered by college

Response : 19

Number of new programmes introduced in the college during the last five years

Response : 3

3.2 Students

Number of students year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
4944	5238	5024	4825	4546

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

2016-17	2015-16	2014-15	2013-14	2012-13
1026	1238	1262	1191	1188

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

2016-17	2015-16	2014-15	2013-14	2012-13
1423	1390	1217	1284	1185

Total number of outgoing / final year students

Response : 13768

3.3 Teachers

Number of teachers year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
385	372	354	336	314

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

2016-17	2015-16	2014-15	2013-14	2012-13
385	372	354	336	314

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

2016-17	2015-16	2014-15	2013-14	2012-13
385	372	354	336	314

Total experience of full-time teachers

Response : 4467.41

Number of teachers recognized as guides during the last five years

Response : 20

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

Response : 1761

3.4 Institution

Total number of classrooms and seminar halls

Response : 124

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

2016-17	2015-16	2014-15	2013-14	2012-13
4027.76	3586.05	6283.65	3950.56	1873.55

Number of computers

Response : 1420

Unit cost of education including the salary component(INR in Lakhs)

Response : 0.905

Unit cost of education excluding the salary component(INR in Lakhs)

Response : 0.387



4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

The College is affiliated to Anna University and the curriculum and syllabi prescribed by the university are strictly adhered to. Apart from this prescribed curriculum, the College has strategized ways and means to strengthen the teaching-learning process in the following ways:

- Advance planning of Academic activities and calendar in alignment with the University issued Calendar of Events
- Formulation of objective driven teaching plan at the beginning of the semester
- Preparation of adequate learning materials (resources)
- Updated library facilities with e-journals
- Maintenance of course files by all faculty members which contains lesson plan, notes of lesson, question bank and performance details of the students
- Adopting new and innovative teaching techniques, in addition to the traditional lecture method to get the students actively involved in the teaching learning processes and employing learner centric techniques such as web related assignments, peer learning, group discussion, use of NPTEL lectures, case studies, projects, surveys, quiz etc., in the delivery of the academic courses
- To meet the challenges in technical environment, the institution organizes contemporary video discussion shows for each Engineering discipline, well planned in advance. Videos depicting the latest technologies are displayed to the students. The students are allowed to discuss, deliberate and innovate upon the ideas within themselves and also with the staff members.
- Entrusting the teaching faculty with the task of mentoring 15 students on academic and personal issues, thereby strengthening the bond between teachers and students, leading to a better learning atmosphere and to sustain their performance.
- Organizing suitable invited guest lectures by industry personnel and industrial visits to improve the effectiveness of implementation of the curriculum designed and specified by Anna University
- Course allotment based on competency matrix, experience and performance in previous years.
- Time table framed with provision for Value Added Programmes (VAP), seminar and library hours.
- The Head of the department and the Principal do a periodical review of the portions covered by the staff members and also the student's attendance.
- Monitoring of course delivery and syllabus completion through formal and informal feedbacks.
- Systematic examination process, standard question papers, proper and prompt evaluation and dispatch of reports to parents.
- Availability of Edumate software to monitor and aid students' performance and teaching and evaluation processes.
- Guest lectures, seminars, Industrial visits and training programmes to supplement the curricular inputs.

Refresher courses, workshops, FDPs for skill up gradation of faculty. Provision of infrastructure facility

Encouraging students to do innovative project work of national interest through IEDC. Motivating students for doing research work and present papers in seminars and conferences and publish in journals.

Bridging Industry –Institution gap with suitable value added programmes which are part of the regular time table.

Adopting "**outcome based approach**" for the effective delivery of the curriculum. Question papers for the internal tests is so designed to facilitate the assessment of the attainments of the course outcomes for the various courses.

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

Response: 35

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

2016-17	2015-16	2014-15	2013-14	2012-13
8	°5	5	5	12

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Details of the certificate/Diploma programs	View Document

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

Response: 45.14

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

2016-17	2015-16	2014-15	2013-14	2012-13
43	34	27	28	27

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

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years					
Response: 9.79					
1.2.1.1 How many new courses are introduced	1.2.1.1 How many new courses are introduced within the last five years				
Response: 125					
File Description	Document				
Details of the new courses introduced	View Document				

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

Response: 100

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

Response: 19

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

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

Response: 23.37

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

2016-17	2015-16	2014-15	2013-14	2012-13
1454	1361	1243	899	823

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

1.3 Curriculum Enrichment

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

Response:

- Equal opportunities are given to both the genders in terms of admissions, employment, training programmes, sports activities etc., and so gender issues do not arise.
- College supports women faculty and students to become member in clubs such as WoW (Women of Worth, Wise, Wisdom), and encourages them to participate in events focusing on women empowerment and promoting leadership qualities in women.
- Women's day is celebrated with vigor in the institution campus. Each year, two best girl students are selected from each department and they are awarded and rewarded by an eminent personality.
- Girls and boys participate in various co-curricular activities such as paper presentations, organization of paper contests, group discussions and technical quiz programmes. Both boys and girls are made members of various clubs associated with academic, co-curricular and extracurricular activities.
- Students have a compulsory course on Environmental Science and Engineering.
- Topics related to these issues are taken up for quiz and debates during the National Science Day, Earth Day celebrations and the Independence Day function.
- Students are also encouraged to participate in activities on climate change organized by other institutes.
- They are taken for industrial visits and effluent and water treatment plants and places that will educate them on environmental issues.
- Awareness programmes are also initiated by NSS, YRC, Environment Club which extensively carry out activities for environmental protection and ecological preservation.
- The curriculum includes courses on professional ethics and IPR and human rights.
- There is software- EDUMATE to enter and view the students' details, marks, attendance, club memberships, university results etc.
- Number of certification programmes related to ICT is organized by the institution.

1. Environmental Science and Engineering

- To the study of nature and the facts about environment.
- To finding and implementing scientific, technological, economic and political solutions to environmental problems.
- To study the interrelationship between living organism and environment.
- To appreciate the importance of environment by assessing its impact on the human world; envision

the surrounding environment, its functions and its value.

• To study the dynamic processes and understand the features of the earth's interior and surface. To study the integrated themes and biodiversity, natural resources, pollution control and waste management.

1. Professional Ethics and Human Values

To enable the students to create an awareness on Engineering Ethics and Human Values, to instill Moral and Social Values and Loyalty and to appreciate the rights of others.

1.Professional Ethics

- To understand the concepts of computer ethics in work environment.
- To understand the threats in computing environment
- To understand the intricacies of accessibility issues
- To ensure safe exits when designing the software projects

1. Business Ethics, Corporate Social Responsibility and Governance (BA7402),

will help the students to understand and find an ethical solution for the workplace and society issues which hinders the society at large. This also enables the students to create an awareness on business ethics and human values which also instills moral and social values

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

Response: 86

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

Response: 86

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

1.3.3 Percentage of students undertaking field projects / internships

Response: 4.05

1.3.3.1 Number of students undertaking field projects or internships

Response: 200		
File Description	Document	
List of students enrolled	View Document	
Institutional data in prescribed format	View Document	

1.4 Feedback System

5)Parents for design and review of syllabus-Seme A.Any 4 of the above	nts, 2)Teachers, 3)Employers, 4)Alumni and ster wise/ year-wise
B.Any 3 of the above	
C. Any 2 of the above D. Any 1 of the above	
Response: A.Any 4 of the above	Decument
Response: A.Any 4 of the above File Description	Document
· · ·	Document View Document

1.4.2 Feedback processes of the institution may be classified as follows: A. Feedback collected, analysed and action taken and feedback available on website

B. Feedback collected, analysed and action has been taken

- C. Feedback collected and analysed
- **D. Feedback collected**

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

File Description	Document
URL for feedback report	View Document

<u>Criterion 2 - Teaching-learning and Evaluation</u>

2.1 Student Enrollment and Profile

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

Response: 1.24

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

2016-17	2015-16	2014-15	2013-14	2012-13
68	65	63	55	53

File Description	Document
List of students (other states and countries)	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

esponse: 85.8	5			
-		d year-wise during th	ne last five years	
2016-17	2015-16	2014-15	2013-14	2012-13
2010 17			-010 1.	
1181	1370	1409	1345	1309
1181	1370	year-wise during the	1345	
1181	1370		1345	

File Description	Document
Institutional data in prescribed format	View Document

2.1.3 Average percentage of seats filled against seats reserved for various categories as per

applicable reservation policy during the last five years

Response: 98.98

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

2016-17	2015-16	2014-15	2013-14	2012-13
1026	1081	1068	1110	985

File Description	Document
Institutional data in prescribed format	View Document

2.2 Catering to Student Diversity

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

Response:

The Secretary, Tamilnadu Engineering Admissions (TNEA), admits first year B.E./B.Tech students through single window system based on their Higher Secondary Examination (HSC) marks.

The Secretary, Tamilnadu Common Admissions (TANCA), admits first year M.E./M.Tech students through single window counseling based on common entrance test (TANCET).

The Secretary, Tamilnadu MBA/MCA Admissions, admits first year MBA/MCA students through single window counseling based on common entrance test (TANCET).

After the students got admitted to our institution, orientation programs are organized for the freshers to help them understand the engineering curriculum. Introductory lectures for all the subjects are devoted to discuss and understand special needs of the students. Students are categorized based on their previous qualifying examinations marks, assessment test, class room performances and personal performance. Assessing the students based on internal examinations helps to identify slow learners and quick learners.

If the students are slow in their learning process, the mentor who is acting as the guide and philosopher finds the nature of their problems and motivates them in a friendly way to reach particular academic goals. To improve on their academic performance, extra classes with separate time table are organized to clarify the doubts and re-explaining of difficult topics.

Quick learners are identified through their performance in examinations. They are motivated by the Principal and the heads of the concerned departments to perform better in the University examinations and to score good grades and thereby maintaining the consistent performance and to bag quality university ranks.

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The institute promotes independent learning facilities that contribute to their academic and personal growth. For example, the institute encourages them to participate in various activities like seminars, workshops, and literary competitions. The institute provides equal weightage to both curricular and co-curricular & extra-curricular activities.

The above process brings out the following outcome:

- Students' understanding in their chosen domain
- Improved results and pass percentage.
- Improved quality of projects
- Improved placements and opting for higher studies

2.2.2 Student - Full time teacher ratio

Response: 12.84

File Description	Document
Institutional data in prescribed format	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls			
Response: 0.08			
2.2.3.1 Number of differently abled students on rolls			
Response: 4			
File Description	Document		
List of students(differently abled)	View Document		
Institutional data in prescribed format	View Document		
Any other document submitted by the Institution to a Government agency giving this information	View Document		

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

As an affiliated college under Anna University, the role for us in the design of the curriculum is very limited. However, the College takes all measures to groom the students to be responsible citizens of our Mother Nation.

Tutorial classes are conducted which supplement regular teaching learning process. Multimedia teaching aids like videos, online materials and PPTs are incorporated in the day-to-day teaching learning process that enhances the students' understanding of the subject.

A separate video hall (SSR hall) has been established to screen technological videos to the students. The videos to be screened is decided by the students in consultation with the faculty members and approved by the HOD and the Principal.

Guest lectures by experts from the industry and academia are organized by the respective departments, to provide knowledge beyond the prescribed syllabus.

Webinars from experts within/outside India, that augments the students to enhance their knowledge and skills are organized regularly in our college.

As a part of the curriculum, Communication Language laboratory has been established for students to improve their English proficiency. In addition, Soft skills training slots are incorporated in the timetable, wherein the students are guided by the experts, in improving the presentation and communication skills.

Students are encouraged to organize and to participate in Inter-collegiate events such as symposium (Convergence, Zenista, etc), project contests (SAITECHGRAIL, etc), to bring out the potential of the students.

Our students are organizing TEDx SAIRAM (an independent event) for the past six years and they continue to do the same.

Industrial visits and value added courses are arranged to give hands-on experience to the students. Our campus is enabled with Wi-Fi facility that allows students to access technical resources.

In addition to academics, to be a socially responsible citizen, our college encourages the students to participate in NSS and NCC activities with equal enthusiasm to develop their overall personality.

The college has a state of art central library well equipped with books & e-books, technical magazines, journals & e-journals and NPTEL lecture videos which serves as a knowledge resource centre.

The students and faculty are motivated to register for online NPTEL Certificate courses in addition to their regular curriculum. The management reimburses 50% of the examination fees if they score more than 80% and 100% reimbursement for those who score more than 90%.

The teachers are encouraged to use modern teaching pedagogy, in addition to conventional classroom teaching practices.

Laboratories with Internet Connection permit the students to widen their knowledge and skills. Faculty members apply teaching methods such as group discussions, seminars/ student presentation for better understanding of concepts/ technologies.

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems

(LMS), E-learning resources etc.		
Response: 83.12		
2.3.2.1 Number of teachers using ICT		
Response: 320		
File Description	Document	
List of teachers (using ICT for teaching)	View Document	

2.3.3 Ratio of students to mentor for academic and stress related issues		
Response: 13.55		
2.3.3.1 Number of mentors		
Response: 365		
File Description	Document	
Year wise list of number of students, full time teachers and students to mentor ratio	View Document	
Any additional information	View Document	

2.3.4 Innovation and creativity in teaching-learning

Response:

An innovative effort of an institution helps in its academic excellence. An innovative practice could be a pathway created to further the interest of the student and the institution, for internal quality assurance, inclusive practices and stakeholder relationships.

The teacher uses multimedia to modify the contents of the course material. It helps him/her to represent in a more meaningful way, using different media elements.

Apart from regular lectures through chalk-and- talk following innovative teaching approaches are being practiced in various departments. LCD projector screens / Overhead projectors help the faculty to deliver interactive lectures and demonstrations of animations/ PPT / lecture contents.

Laboratories with Internet Connection allow the students to widen their knowledge and skills. Some of the experiments during practical are also getting conducted using simulation tools.

Charts and models are used by the faculty to explain the fundamental topics and advance technologies, in theoretical and practical sessions.

File Description	Document
Any additional information	View Document

2.4 Teacher Profile and Quality

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

 Response: 100

 File Description
 Document

 Year wise full time teachers and sanctioned posts for 5 years
 View Document

 List of the faculty members authenticated by the Head of HEI
 View Document

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

Response: 12.01

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

2016-17	2015-16	2014-15	2013-14	2012-13
58	44	39	37	35

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

2.4.3 Teaching experience per full time teacher in number of years

Response: 11.6

File Description	Document
List of Teachers including their PAN, designation, dept and experience details	View Document

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

Response: 12.78

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

2016-17	2015-16	2014-15	2013-14	2012-13
18	6	6	10	5

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

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

Response: 3.08

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

2016-17	2015-16	2014-15	2013-14	2012-13
14	14	11	9	7

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

2.5 Evaluation Process and Reforms

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

Response:

CSE

• Two unit test and one model exam in theory subjects and one model examination in case of

practical are conducted in each semester.

- The department will carry out internal assessment on all subjects based on internal test performance of the students.
- Continuous evaluation procedure is followed for practical subjects.

Effective implementation of evaluation reform of the university are strictly followed and those initiated by its own are ensured by the institution by strict compliance of process and procedure devised/ suggested by the university in order to follow the continuous evaluation system. The Institute has taken following measures for the effective implementation of the evaluation reforms introduced by the University: The Institute has exam coordinators from each department for smoothconduction of the examination. The examination committee meets periodically to discuss all the examination related matters. At Institute level, effective implementation of tutorial and mid-sem test takes place and results are declared within eight days. The students can see their evaluated answer sheets and discuss the same with concerned faculty. Term test is based on the university syllabus. This will be in the form of questions of graded nature. Theory questions and numerical questions are also included.

All the data are collected and stored in digital format for recovery/reference purpose. Final year term work is jointly evaluated by external examiners.

Viva and oral are conducted with the current topics with the relevant academicians and industry people to give an exposure to the students of the various disciplines.

Practical are conducted based on the syllabus prescribed the Anna university.

For smooth conduction of University theory examination, an internal squad comprising of senior faculty members is appointed. The evaluation processes are automated through intranet facilities. The faculty enter attendance and marks of the students periodically. The credit system for each course is introduced for UG degrees. The Institute appoints examiners for the practical examinations and viva voce examinations as per the University directives The Institute sends its faculty members as examiners to evaluate semester answerscripts to the affiliating University. The regulations, curricula and syllabi of all the programmes offered by the Institute are available in the Institute and the affiliated University websites. The regulations contain the details of the evaluation process. The Officer-In-Charge of the Examination Cell of the Institute has prepared an Instruction Manual as per the guidelines of the Controller of Examination of Anna University University to conduct of examinations and copies are available to all departments. During the Induction program the newly admitted students are updated about the attendance requirements as well as the pass mark requirements and the grading systems for the internal assessments. Whenever the students are in doubt, they are encouraged to clarify them by discussing with the teachers/principal.

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

Response:

- The internal marks are based on the cycle test, model exams and attendance percentage. Internal marks and attendance are periodically communicated (SMS) to the parents.
- The answer scripts of examinations are shown to the students after evaluation to bring out the discrepancies, if any, to the notice of teacher concerned, and the necessary corrections are carried out.

• The students are made aware of the evaluation procedures including revaluation and challenge valuation, examination pattern of college and the university, well in advance through circulars as well as information printed in the college calendar.

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

Response:

- On the Induction Day, the first year students are made aware of the evaluation processes.
- The university allots 80% marks for the end semester exams and 20% internal marks.
- The marks in the internal tests are uploaded in Anna University web portal.
- Attendance is entered periodically in the Anna University web portal.
- During Parent-teachers meeting, parents are made aware of accessing the students' marks from the Anna university web portal.
- The class teachers carefully monitor the regularity of attendance and the performance of the students in internal evaluation tests and end semester examinations.

File Description	Document
Any additional information	View Document

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

Response:

An academic calendar is prepared by the institute as explained below: Academic year starts as prescribed by Anna University. The university publishes in advance, the academic calendar containing plans for curricular and co-curricular activities based on the available working/teaching days as per university norms. Student council of the college responsible for making the academic calendar prepares the College academic calendar in concurrence with the University calendar. Approval for the same is given by heads of departments and the Principal after effecting minor changes if required . The academic calendar is then made known to all faculty before the commencement of the semester. Lesson plans are then prepared based on the academic calendar. Academic calendar of the Institute includes schedule of curricular activities, assessment dates, technical events, class tests, submission of marklists, list of holidays and extra curricular activities. Students are then informed about time table and academic calendar. The detailed lesson plan/teaching methodology as suited to syllabus is prepared by each faculty before start of the semester. The lesson plan comprises of content, learning aid and methodology, faculty approach and course outcomes. The lesson plan generally highlights the content and total lectures for completion of the curriculum. Monitoring of implementation of lesson plan is done by Heads of the departments and corrective actions are suggested wherever required.

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The laboratory Schedule is prepared by the concerned faculty and batch-wise details are specified in laboratory schedule. Time Table of regular lectures for the semester is prepared as well and displayed on the notice board and website. There is an academic monitoring committee appointed by the Principal/HOD who monitors the day- to- day conduct of the lectures based on the time table.

File Description	Document
Any additional information	View Document

2.6 Student Performance and Learning Outcomes

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

Response:

Program Outcomes

1. Apply knowledge of management theories and practices to solve business problems.

2. Foster Analytical and critical thinking abilities for data-based decision making.

3. Ability to develop Value based Leadership ability.

4. Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.

5. Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

Program Specific Outcomes (PSOs) are what the graduates of a specific postgraduate program should be able to do at the time of graduation. The PSOs are program specific. PSOs are written by the Department offering the program. PSOs should be two to four in number. A Department can differentiate its program through PSOs.

Program Specific Outcome

PSO 1 :

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Formulate an integrative business project through the application of multidisciplinary knowledge comprising of accounting, finance, operations, management information system, marketing and human resources management

PSO 2:

Employ financial decision models to select appropriate projects for a business enterprise and manage firm growth through strategies such as mergers, acquisitions, international expansion, and new venture development

Program Educational objectives : describe the career and professional accomplishments that programs are preparing graduates to attain within a few years of graduation.

PEO 1: Our MBA graduates shall have analytical skills applying business analysis, data management and diagnostic problem-solving skills in order to support management decision-making.

PEO 2: Our MBA graduates shall have leadership and team membership skills needed for implementing and coordinating organizational activities and managing change.

PEO 3: Our graduates shall have an understanding of how global competitive environments are changing business practice.

PEO 4: Our graduates shall have the ability to integrate business knowledge and management techniques to aid planning and control in a changing environment.

Course outcomes

PRINCIPLES OF MANAGEMENT

CO1 : To describe and discuss the elements of effective management,

CO2: discuss and apply the planning, organizing and control processes,

CO3: describe various theories related to the development of leadership skills, motivation techniques, team work and effective communication,

CO4: communicate effectively through both oral and written presentation.

STATISTICS FOR MANAGEMENT

CO1: To facilitate objective solutions in business decision making under subjective conditions

ECONOMIC ANALYSIS FOR BUSINESS

CO1: To become familiar with both principles of micro and macro economics.

CO2: To become familiar with application of these principles to appreciate the functioning of both product and input markets as well as the economy.

TOTAL QUALITY MANAGEMENT

CO1: To apply quality philosophies and tools to facilitate continuous improvement and ensure customer delight.

ORGANIZATIONAL BEHAVIOUR

CO1: To have a better understanding of human behavior in organization.

CO2: To know the framework for managing individual and group performance.

ACCOUNTING FOR MANAGEMENT

CO1: To Possess a managerial outlook at accounts

LEGAL ASPECTS OF BUSINESS

CO1: To know how to establish Legal insight in the business practices according to the situation of changing environment.

WRITTEN COMMUNICATION

CO1: To get into the habit of writing regularly

CO2: To express themselves in different genres of writing from creative to critical to factual writing,

CO3: To take part in print and online media communication,

CO4: To read quite widely to acquire a style of writing,

CO5: To identify their areas of strengths and weaknesses in writing.

OPERATIONS MANAGEMENT

CO1: To Understand the strategic and operational decisions in managing manufacturing and service

organizations

CO2: To appreciate the role of operations management function in an organization.

FINANCIAL MANAGEMENT

CO1: Possess the techniques of managing finance in an organization

MARKETING MANAGEMENT

CO1: knowledge of analytical skills in solving marketing related problems

CO2: awareness of marketing management process

HUMAN RESOURCE MANAGEMENT

CO1: To gain knowledge and skills needed for success as a human resources professional

INFORMATION MANAGEMENT

CO1: Gains knowledge on effective applications of information systems in business

APPLIED OPERATIONS RESEARCH

CO1: To facilitate quantitative solutions in business decision making under conditions of certainty, risk and uncertainty.

BUSINESS RESEARCH METHODS

CO1; Students would become acquainted with the scientific methodology in business domain.

CO2: To become analytically skillful.

CO3: To become familiar with the nuances of scientific communications.

DATA ANALYSIS AND BUSINESS MODELING

CO1: Knowledge of spreadsheets and data analysis software for business modeling

ENTERPRISE RESOURCE PLANNING

CO1: knowledge of ERP implementation cycle

CO2: awareness of core and extended modules of ERP

STRATEGIC MANAGEMENT

CO1: To create knowledge and understanding of management concepts principles and skills from a people, finance, marketing and organizational perspectives

CO2: To know the development of appropriate organizational policies and strategies within a changing context to meet stakeholder interests information systems

CO3: to learn from failure key tools and techniques for the analysis and design of information systems, including their human and organizational as well as technical aspects.

PROFESSIONAL SKILL DEVELOPMENT

CO1: To speak confidently with any speakers of English, including native speakers

CO2: To speak effortlessly in different contexts - informal and formal,

CO3: To 'think on feet' even in difficult circumstances,

CO4: To hold interesting and meaningful conversations with others, including strangers,

CO5: To listen to others with utmost attention.

INTERNATIONAL BUSINESS MANAGEMENT

CO1: Students would be familiar with global business environment, global strategic management practices and get acquainted with functional domain practices.

CO2: To be familiar with conflicts situations and ethical issues in global business.

BUSINESS ETHICS, CORPORATE SOCIAL RESPONSIBILITY AND GOVERNANCE

CO1: To understand ethical issues in workplace and be able to find solution for 'most good'

CREATIVITY AND INNOVATION

CO1: To apply his/her creative and innovative skills in solving complex problems confronting corporate realm.

BRAND MANAGEMENT

CO1: To successfully establish and sustain brands and lead to extensions

RETAIL MANAGEMENT

CO1: To manage the retail chains and understand the retail customer's behavior

SERVICES MARKETING

CO1: to apply the concepts of services marketing in promoting services.

INTEGRATED MARKETING COMMUNICATION

CO1: Insight into the importance of advertising and sales promotion campaigns planning and objective setting in relation to consumer decision making processes.

CUSTOMER RELATIONSHIP MANAGEMENT

CO1: To use strategic customer acquisition and retention techniques in CRM.

RURAL MARKETING

CO1: Perspectives of rural marketing

CO2: To gain knowledge of the emerging managerial initiatives and relevant frameworks in rural marketing, institutions engaged in rural marketing

SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

CO1: To Become a good investment analyst

MERCHANT BANKING AND FINANCIAL SERVICES

CO1: To have Good knowledge on merchant banking activities

INTERNATIONAL TRADE FINANCE

CO1: Possess good knowledge on international trade and the documentation involved in it.

CORPORATE FINANCE

CO1: Good ethical corporate manager

MICRO FINANCE

CO1: Possess good knowledge in micro finance management

BANKING FINANCIAL SERVICES MANAGEMENT

CO1: To Price various types of loans proposed by banks to various prospective borrowers with different risk profiles

CO2: To evaluate the performance of banks

MANAGERIAL BEHAVIOR AND EFFECTIVENESS

CO1: Students will gain knowledge about appropriate style of managerial behavior.

ENTERPRENEURSHIP DEVELOPMENT

CO1: Students will gain knowledge and skills needed to run a business.

ORGANISATIONAL THEORY, DESIGN AND DEVELOPMENT

CO1: To analyze organizations more accurately and deeply by applying organization theory.

INDUSTRIAL RELATIONS AND LABOUR WELFARE

CO1: To know how to resolve industrial relations and human relations problems and promote welfare of industrial labor.

LABOUR LEGISLATIONS

CO1: To appreciate the application of labor laws.

CO2: Legal Provision relating to a) Wages b) Working Conditions and Labor Welfare c) Industrial Relations d) Social Security.

STRATEGIC HUMAN RESOURCE MANAGEMENT

CO1: To have a better understanding of the tools and techniques used by organizations to meet current challenges.

ADVANCED DATABASE MANAGEMENT SYSTEMS

CO1: Awareness of database models

CO2: Knowledge of database technologies

e-BUSINESS MANAGEMENT

CO1: To know how to build and manage an e-business

SOFTWARE PROJECT AND QUALITY MANAGEMENT

CO1: Knowledge of software development process and quality models

CO2: Knowledge of software project estimation and quality assurance

DATAMINING FOR BUSINESS INTELLIGENCE

CO1: Big Data Management

CO2: Appreciate the techniques of knowledge discovery for business applications

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

CO1; Student gains knowledge on effective management of the logistics and supply chain

SERVICES OPERATIONS MANAGEMENT

CO1: To design and operate a service business using the concepts, tools and techniques of service operations management.

PROJECT MANAGEMENT

CO1: To apply project management principles in business situations to optimize resource utilization and time optimization

LEAN SIX SIGMA

CO1: To be able to relate the tools and techniques of lean sigma to increase productivity

Upload a description of Mechanism of Communication

Many accrediting institutions are requiring that institutions communicate clearly to constituents:

1) what learning outcomes were achieved by students, and

2) what level of attainment of these outcomes is required to assure the quality of

program offerings.

The intent of this change was not only to drive improvements in the educational process, but also to facilitate faster feedback on the effectiveness of various programs and support functions to stakeholders in the process.

Learning outcomes and Students performance should be communicated to

- 1. Accreditation Boards
- 2. Institution's Administration
- 3. Faculty
- 4. Students
- 5. Parents
- 6. Employers

File Description	Document
Any additional information	View Document

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

Response:

Students' progress and learning outcomes are monitored through continuous evaluations, tutorials and laboratory exercises, and live projects/assignments. The College conducts three tests in all courses and reviews the performance of students in the faculty meeting at departmental level and in the meeting of result committee under the chairmanship of the CEO. At the end of each semester, student feedback is taken; course wise performance of students is discussed, analyzed and recorded in terms of grades. Based on discussion, feedback of student and faculty, course contents are improved. Weak students are encouraged for special meetings and interaction with the faculty to identify their problems and means to solve them.

Attainment of POs indicates that the job is well done. Curriculum, Assessment and Evaluation are the major tools by which Program Outcomes are attained. We should look at all of these together.

- Analyze the University Curriculum
- Determine the Gaps in Attainment of Pos
- Design Extra {modules} / {Assessments} to Bridge these gaps
- Could need a few iterations
- These steps are important. They impact on what follows.

Our analysis may indicate that

- Not all POs are Attainable with the Given Curriculum.
- May need some additional modules AND
- Design of In-Sem evaluation and assessment to take care of the gaps.
- A record of all this work is needed.
- 1. List of All additional modules added along with the details of contents, and where these are being offered. etc
- 2. Evaluation {In-Sem. Papers, Tutorials, typical answer scripts, etc} along with COs- POs targeted therein.

Program Outcomes (POs) as identified by National Board of Accreditation (NBA), India are what the graduates of an undergraduate engineering program should be able to do at the time of graduation. The POs are discipline non-specific. A total of twelve Program Outcomes have been prescribed in the NBA as

PO1. Engineering Knowledge

PO2. Problem Analysis

PO3. Design/development of solutions

PO4. Conduct Investigations of Complex Problems:

PO5. Modern Tool Usage

PO6. The Engineer and Society

PO7. Environment and Sustainability

PO8. Ethics

PO9. Individual and Team Work

PO10. Communication

PO11. Project Management and

Finance PO12. Life-long learning Program Specific Outcomes (PSOs) are what the graduates of a specific undergraduate engineering program should be able to do at the time of graduation. The PSOs are program specific. PSOs are written by the Department offering the program. PSOs should be two to four in number. A Department can differentiate its program through PSOs.

Sample: PSO for Computer Science & Engineering:

PSO 1: Demonstrate understanding of the principles and working of the hardware and software aspects

of computer systems.

PSO 2: Use professional engineering practices, strategies and tactics for the development, operation and

Maintenance of software.

PSO 3: Provide effective and efficient real time solutions using acquired knowledge in various domains.

Program Educational Objectives (PEOs) describe the career and professional accomplishments that programs are preparing graduates to attain within a few years (3-5 years) of graduation.

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

Assessment – Assessment is one or more processes, carried out by the institution, that identify, collect, and prepare data to evaluate the achievement of programme educational objectives and programme outcomes.

Evaluation – Evaluation is one or more processes, done by the evaluation team, for interpreting the data and evidence accumulated through assessment practices. Evaluation determines the extent to which programme educational objectives or programme outcomes are being achieved, and results in decisions and actions to improve the programme.

Mapping – Mapping is the process of representing, preferably in matrix form, the correlation among the parameters. It may be done for one to many, many to one, and many to many parameters.

Bloom's Taxonomy of Learning Domains was created in 1956 under the leadership of educational psychologist Dr. Benjamin Bloom in order to promote higher forms of thinking in education, such as analyzing and evaluating concepts, processes, procedures, and principles, rather than just remembering facts (rote learning). It is most often used when designing educational, training, and learning processes.

The three Domains of Learning are

(1) Cognitive: Mental Skills (Knowledge)

(2) Affective: growth in feelings or emotional areas (attitude or self) and

(3) Psychomotor: manual or physical skills (skills).

Some of the courses/subjects are only theoretical in nature, some are theoretical with practical and others with only practical/session. To attain the course outcomes for the course/subject, the faculty members use various Direct or Indirect tools as assessment methods. Faculty has to assess the CO and PO attainment using some direct and indirect methods, where a lot of clerical actions get involved. Due to the time constraints and many other activities such efficient assessment may get not good results.

COURSE OUTCOME ASSESSMENT METHODOLOGY

The process of attainment of COs, POs and PSOs starts from writing appropriate COs for each course in the four-year engineering degree program. The course outcomes are written by the respective faculty member using action verbs of learning levels as suggested by Bloom Taxonomy [3]. Then, a correlation is established between COs and POs and COs and PSOs on the scale of 0 to 3, 0 being no correlation, 1 being the low correlation, 2 being medium correlation and 3 being high correlation. A 6x12 mapping matrix of COs-POs and 6x4 mapping matrix of COs-PSOs is prepared in this regard for all courses in the program.

ATTAINMENT OF COS AND POS

Thus, mapping matrix of COs – POs and COs - PSOs are prepared for all the 56 courses and finally these matrices are merged to form a "Program level CO-PO Matrix and CO – PSO Matrix.

Some of the Direct CO assessment tools used to measure the attainment levels are :

- ◆ Test I,
- Test II,
- Assignments, Quiz,

- end semester exams,
- performance during experiments etc.

Course Exit survey is also conducted at the end of the semester. The different weights are assigned to each of above tools.

2.6.3 Average pass percentage of Students

Response: 94.22

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

Response: 5742

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

Response: 6094

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

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding	teaching learning process
Response: 2.75	
File Description	Document
Database of all currently enrolled students	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 408.83

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

2016-17	2015-16	2014-15	2013-14	2012-13
30.738	131.8414	131.962	90.065	24.22

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

3.1.2 Percentage of teachers recognised as res	earch guides at present
Response: 5.19	
3.1.2.1 Number of teachers recognised as researcher	ch guides
Response: 20	
File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

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

Response: 0.87

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

Response: 305

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Funding agency website URL	View Document

3.2 Innovation Ecosystem

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

Response:

Our Institution is located in an eco friendly campus and our management encourages staff and students to carry out research projects that give practical solutions to problems which causes hazard to the environment. Our college has an Incubation centre, named as Sri Sairam Engineering Incubation Centre (SEIC) and the members are from academic Institutions, Entrepreneurs and Industrialist. The facilities at SEIC includes

Seed Money: We provide limited seed money to our Incubates at reasonable rate of interest (soft loan).

In Campus Accommodation: We provide in campus accommodation to our Incubates in the campus itself. We provide them with studio apartment for one family (i.e. two persons).

Mentoring: A faculty member of SSEC mentors and closely monitors product development of the incubate company.

Business Plan development: The students of MBA program of SSEC along with a management consultant help incubate companies to strengthen their business plan after conducting market surveys, if required, and financial plan.

Business Promotion: SEIC helps finding business partners & venture capitalists and provide consultancy on business promotion with the help of the MBA students & faculty.

Incubation Space: We provide furnished air conditioned space to our Incubates. The centre has rooms of three sizes. Besides this we also have our Seminar/Conference Halls.

Office support: We provide various official facilities to our Incubates which include:

- High End PCs. with Printer on rental basis.
- Telephone, Telex, Photocopy, Fax and Teleconferencing etc.
- High Bandwidth Internet Connectivity

Library and Documentation: The Incubates through our centre can have access to the library of SSEC at very nominal charges.

Assistance in Obtaining Finance: SEIC facilitates to obtain funds for the incubate companies at a post incubation phase through a network of venture capitalists from all over Tamil Nadu

Advertisement Agencies: We have several links to the advertisement agencies all over Tamil Nadu, which help the companies at our centre to advertise themselves.

Legal experts: We have a panel of highly qualified legal experts which advise the companies at our centre in their legal matters.

Advantages of Electronic and Animation Cell: The UG and PG students of SSEC are provided space and necessary facilities to develop novel Electronic and Animated products/software.

Innovative Creation and Transfer of Knowledge to the Society

- A Stainless Steel Plate production centre: It produces Stainless Steel plates and marketing it to small vendors in and around Chennai. It has been used in our Canteen and hostel also.
- Eco friendly paper cup manufacturing center: The centre has been producing tea cups and it has been marketed to our canteen and local teashops. Areca nut tea cups are also produced and marketed.
- Web Design Development Centre: It is facilitating for web development for our various department activities and also for various small ventures in and around of Chennai.
- Market Research Survey Centre: The service centre has focused on customer and market based research for limited, private limited and small medium enterprise at National Level.

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

Response: 263

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

2016-17	2015-16	2014-15	2013-14	2012-13	
64	42	47	55	55	
File Description	n		Document		
File Description			Document View Document		

3.3 Research Publications and Awards

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

Response: Yes	
File Description	Document
Institutional data in prescribed format	View Document

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

Response: Yes

File Description	Document
List of Awardees and Award details	View Document
e- copies of the letters of awards	View Document

3.3.3 Number of Ph.D.s awarded per teacher during the last five years Response: 1.45 3.3.3.1 How many Ph.Ds awarded within last five years Response: 29 File Description Document URL to the research page on HEI web site View Document List of PhD scholars and their details like name of the guide , title of thesis, year of award etc View Document

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

Response: 1.38

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

	2012-13
100 100 100 100	87

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

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

Response: 1.35

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

2016-17	2015-16	2014-15	2013-14	2012-13	
100	80	100	95	100	
File Descriptio	n	D	ocument		

3.4 Extension Activities

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

Response:

We at Sairam engineering College not only excel in academics but also in other extension activities. The NSS and NCC of the college actively take part in various activities organized by the government.

Our students took part and won prizes and accolades at various events. The gold medal for tent pitching event was won by CWO Mr.L.Hari Krishna Rao of 2010 to 2014 batch. This event was conducted for 10 days from 20th of September 2011 to 29th of September 2011. This gold medal was awarded by Air Vice Marshal GP Singh, Additional director general of NCC, Central Government. B. Renuga of 2011 batch won the directorate for annual NCC Republic Day camp and Prime Minister's rally.

This event was held for 29 days from first of January 2014 to 29th of January 2014. K Deepika of 2014-15 batch won the best NSS Volunteer award in October 2015. This award was given to her by Anna University. Cadet/Sgt.B.G.Nivedihitha of 2010-14 batch won gold medal in the skeet shooting event. This event was organised for 10 days from 4th August 2012 to 13th August 2012 at Kadhir College of engineering, Coimbatore. Sri Sairam engineering College organises blood donation camps every year and has won the blood donation award given by the Madras voluntary blood bureau on 28th of August 2015 at Kumara rani Meena Muthiah college and also received the same award on 16th of September 2016 at

Chettinad Vidyashram Auditorium. Sri Sairam engineering College has been receiving this award consecutively for several years. The NSS wing of the college has organised seven day special camp from 25th January 2013 to 31 January 2013. 110 students participated in this special camp. Also a blood donation camp was organised on 4th of March 2013. Around 200 students participated as NSS volunteers for this mega event. NSS has been organising various events like reaching the unreached, awareness seminar on commonest infections, rallies on illicit arrack, Road safety awareness at Marina and Guindy. The rally was on 15th of June 2014 and the Road safety awareness program was conducted on 23rd and 24th of September 2014. Special seven day camp was organised by NSS from 24th of January 2015 to 30th of January 2015. Around 110 students participated in this camp. Green Kalam project rally was widely appreciated by the public. This event was conducted effectively by the NSS wing of the college on 24 July 2016. Around 200 students and staff participated in this event. A tree plantation programme was also conducted by NSS on 27 July 2016. Cancer awareness programme was conducted on fourth of February 2017.

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

Response: 13

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

	2016-17	2015-16	2014-15	2013-14	2012-13
	5	5	2	0	1

File Description	Document
Number of awards for extension activities in last 5 years	View Document

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

Response: 120

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

2016-17	2015-16	2014-15	2013-14	2012-13
21	28	17	37	17

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

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

Response: 20.27

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

2016-17	2015-16	2014-15	2013-14	2012-13
1018	971	1229	1028	749

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

Response: 518

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

2016-17	2015-16	2014-15	2013-14	2012-13
111	181	80	76	70

File Description	Document
Number of Collaborative activities for research, faculty etc.	View Document
Copies of collaboration	View Document

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

Response: 84

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

2016-17	2015-16	2014-15	2013-14	2012-13
22	10	14	11	27

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

The vision of the college management is to constantly improve the students learning environment by providing infrastructure that is on par with the prestigious institutions of India. The college is actively trying to improve the quality of the knowledge imparted on the students, our policy allows us to be flexible and adapt to the current needs of our students so that we are able to bring the best out of them. The college is constructing a digital library, an R&D cell to satisfy the aforementioned need.

The college also organizes several seminars, talks, workshops, faculty development programmes related to emerging technologies to keep everyone in college updated in their respective fields. We thoroughly believe in learning through a visual medium and this led to the construction of two video presentation halls (with a capacity of about 270).

The campus is spread over an area of 40 acres with a plinth area of 162050.7 sq.m. comprising buildings of high-standard, classrooms with proper ventilation, numerous laboratories, auditorium, smart classrooms, library, indoor and outdoor stadiums. Restrooms are provided at regular intervals in each corridor.

Facility	Total Number	Total Area in Sq.m
Class Rooms	107	9012 Sq.m
Tutorial Room UG	32	1429 Sq.m
Tutorial Room PG	15	756 Sq.m
Labs	110	10070 Sq.m
Seminar Halls	15	2659 Sq.m
Smart Class Rooms	2	334 Sq.m

L		
Auditorium	1	20849 Sq.m
1. Sri Leo Muthu Stadium	1	1217 Sq.m
 2. Sigma Auditorium 3. B Block Auditorium 	1	335 Sq.m
4. Open Air Auditorium	1	
	1	1485 Sq.m
Video Conferencing Room	2 (Each 283 Sq.m)	566 Sq.m
Workshop	5	1294 Sq.m
Additional Workshop	14	3647 Sq.m
Drawing Hall	3	504 Sq.m
Research Lab	8	799 Sq.m
Computer Centre	3	865 Sq.m
Library	Stack Area	414 Sq.m
	Reading and Reference	293 Sq.m
Central Library	Periodical Section	28 Sq.m 7749 Sq.m
HOD & Faculty Cabin	46	1697 Sq.m

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

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

Response:

Sports facilities have been established for various games inclusive of Cricket, Football, Basketball, Volleyball to ensure the focus of the institute in providing extra-curricular activities to the students. Separate and spacious hostels are provided for both boys and girls from various regions of the nation.

Sports Complex (Indoor Stadium)

- Chess
- Shuttle Badminton
- Table Tennis
- Carrom

Gymnasium:

- Weight lifting
- ٠
- Dumbbell sets
- Pull up bars
- Squat stations

Extra Curricular Activities

The college organizes events related to NSS, NCC, and YRC. There are nearly 50 different clubs pertaining to various topics of interest ranging from Adventure to Health club to Robotics and others.

S	. No	Sports/Indoor or Outdoor Games/Gym/Cultural Activities/Yoga	Number of Courts	Area	Size	Year of Establishmen	Use
	1.	Volleyball (alternatively used)	4	2400 Sq.m	162 Sq.m	2002	

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2.	Basketball	2	2400 Sq.m	960 Sq.m	2002	
3.	Ball-Badminton (alternatively used)	4	2400 Sq.m	13.42'X19.52	2002	
4.	Throwball	1	2400 Sq.m	12'x18.50'	2002	
5.	Cricket Nets	2	130 Sq.m	10'x70'	2006	
6.	Cricket grounds	2		210' circumstance	2006	
7.	Football (alternatively used)	3 Fields	54785 Sq.m	1100Mx60M	2006	
8.	Hockey (alternatively used)	3 Fields		90Mx60M	2006	
9.	Multi Gym (Modular Gym)	1	155 Sq.m		2008	
10.	Sigma Auditorium Badminton	4	1217 Sq.m	40'x22	2015	
11.	Leo Muthu Indoor Stadium				2015	
12.	Table Tennis	10 Boards	20849 Sq.m	-	2015	
13.	Carrom	4 Boards		-	2015	
14.	Chess	500 -Participation		-	2015	
15.	400 M Standard Track – field		36435 Sq.m	-	2015	

1. Achievements in the past 5 years

- Anna University Zone IV Overall Championship for the past 6 years
- Conducted SAIRAM- TIES 2015 with the record participation of 208 colleges

1.Events Conducted (Regular)

- Anna University Zonal and Interzonal Sports
- Sairam Trophy Cricket, Volleyball, Kabaddi & Throwball (W)
- Memorial Trophy Table Tennis (M&W) & Badminton (M&W)
- Chess Tournament State Level
- School Tournament Athletic Events
- Corporate Tournament Cricket, Volleyball, Badminton & Athletic Events

Regular Cultural Activities

- Through Student Clubs talents in Music, Dance, Quizzing, Adzap, Oratorical, Essay Writing, Dumb 'C', etc., are identified and sent for inter collegiate competitions and competitions organized by other organisations.
- Sai Carnival Annual Cultural Day Cultural Competitions are held as Inter Departmental Level and a Celebrity will be invited for honouring the winners and the department which scores the maximum points.
- Participation in TV Channels and Broadcasting channels by students and staff
- Hostel Day Cultural Presentation

File Description	Document
Any additional information	View Document

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

Response: 62.1

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 77

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document

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

Response: 44.33

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

2016-17	2015-16	2014-15	2013-14	2012-13	
1600	1475	3700	1865	650	
	·	·			
ile Descriptio	n		Document		
The Description Details of budge		ling salary during	Document View Document		
-	et allocation, exclud	ling salary during	Document View Document		

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)
Response:
Books
 Titles -16152 Volumes -68559
 Volumes -08339 Book Bank - 762
Back Volumes - 1717
Non book Materials CD – 3866
Project Reports – 5494
Journals/Periodicals

- Print 157
- Online -5 packages
- Magazines -16
- News papers -10 (Copies 16)

Addition in last five years

Year	2016-2017	2015-2016	2014-20
Particulars			
Books	2060	1942	2064
e-Books	1500+	1500+	1500+
Journals	107	107	107
e-Journals	Science Direct (275)	Science Direct (275)	Science
	IEEE (273)	IEEE (273)	IE E(2
	Springer (586)	Springer (ECE, EEE, CSE-149)	ASME(
	ASCE (36)	Springer	ASCE(
	DELNET	(Mech49)	Springe
		ASCE (36)	Proques
		DELNET	DELNI
		BCL	

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3.0 Version, 2015

Back Volume	165		149	143
Project Report	415		528	657
Magazine	16		16	16
Newspaper	10		10	10
4.2.1 Library is aut	omated using Int	egrated Library Mar	nagement System (ILMS)	Yes Automated (5)
Name of the ILMS	Software Na	ature of automation	Version	
Name of the ILMS	Software Na	ature of automation	Version Year of Automatic)n
Name of the ILMS		ature of automation		
	Fu		Year of Automatic	f Purchase 2008

File Description	Document
Any additional information	View Document

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

Fully

Response:

SAIABRAS

Collection of Rare Books – 1113 Nos. (Encyclopaedias + Handbooks + Dictionaries + Costly Books)

Videos beyond syllabus – 70 CDs

Gate and Competitive exam books -500 Nos – Library is providing resource for higher education and career guidance.

Book Bank -1717volumes – Book Bank facility is one of the important facilities for students coming from under privileged section of the society.

Project reports – 5484

Library has also made provision for students to refer old question papers for preparing their examination.

Because of currency, convince, relational mobility, low cost of content, we are making provision for our users to access e-resources through subscription, consortia basis and freely available / open success e-resources.

4.2.3 Does the institution have the following:	
1.e-journals	
2.e-ShodhSindhu	
3.Shodhganga Membership	
4.e-books	
5.Databases	
A. Any 4 of the above	
B. Any 3 of the above	
C. Any 2 of the above	
D. Any 1 of the above	
Response: A. Any 4 of the above	-
File Description	Document
Details of subscriptions like e-journals,e-	View Document
ShodhSindhu,Shodhganga Membership etc.	
zie	

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

Response: 29.14

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

2016-17	2015-16	2014-15	2013	3-14	2012-13	
24.38	27.14	23.55	39.2	24	31.40	
File Description	on		Document			
Details of annu	on al expenditure for pu uring the last five yea		Document View Docur	ment		

4.2.5 Availability of remote access to e-resources of the library		
Response: Yes		
File Description	Document	
Details of remote access to e-resources of the library	View Document	

4.2.6 Percentage per day usage of library by teachers and students		
Response: 9.03		
4.2.6.1 Average number of teachers and students usin	ng library per day over last one year	
Response: 481		
File Description	Document	
Details of library usage by teachers and students	View Document	
Any additional information	View Document	

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The college has more than 20WiFi hotspots with extenders provided to cover the wireless range throughout the college. All computers in the campus are connected to the internet as it is essential for them to work, also surplus Ethernet ports are provided for laptops or other devices in need of internet connectivity.

A separate team with in-house staff is formed to take care of the IT & related needs of the campus such as Software Development, Hardware & Networking, Website designing & hosting, Email solutions, SMS solutions, etc. The entire campus including Hostels has Wi-Fi connectivity and speed of the internet

connectivity is 145Mbps provided by Tata.

Updations in IT Facilities and Wi-FI

1.	Updations in Systems	Year of Updations	
2.			
1.	120 Systems updated from Core 2 Duo to Dell OptiPlex 3046 Core i5 in IT Department	1.	
	120 Systems updated fromCore 2 Duo to Dell OptiPlex 3046 Core i5 in Mechanical Department	1.	
1.	180 Systems updated in CSE Department	1.	
1.	90 Systems updated in S&H Department for Communication Skills Lab	1.	

Wi-Fi Access Points were installed in the following various locations. Also, the Wi-Fi access points are updated constantly during regular intervals as and when required.

- Ruckus Zone Flex 2741 Purchased in 2012
- Ruckus Dual Band 7363- Updated in 2013
- Ruckus Zone Flex 7372 Updated in 2014
- Ruckus R510 Update in progress in Gents Hostel (2017)

Sl. No.	Installed Location	DEVICE
1	PG – Boys Hostel	1
2	B –Block(PRODUCTION)	1

File Description Any additional in		Document View Document	
1	TOTAL		20
16	Mechanical Block (I, J, K	(Block)	2
15	Exam Cell		1
14	IT LAB (CC-IV)		1
13	C Block		1
12	B Block		1
11	F Block – Third flo	or	1
10	F Block-Second Flo	or	2
9	Placement – D Bloo	ck	2
8	Boys Hostel – B		1
7	Boys Hostel – A		2
6	Girls Hostel – B		1
5	Girls Hostel – A		1
4	Principal Room		1
3	Office		1

4.3.2 Student - Computer ratio

Response: 3.48

File Description	Document
Student - Computer ratio	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line) >=50 MBPS		
35-50 MBPS		
20-35 MBPS		
5-20 MBPS		
Response: >=50 MBPS		
File Description	Document	
Details of available bandwidth of internet View Document connection in the Institution View Document		
Any additional information	View Document	

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS) Response: No

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

4.4 Maintenance of Campus Infrastructure

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

Response: 36.76

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

2016-17	2015-16	2014-15	2013-14	2012-13
1556.05	1235.42	1693.96	1265.45	969.19

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	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:

The college has appointed several personnel for maintaining the infrastructure by way of building maintenance, transport, furniture and generator operator in case if the power shuts down. Separate Complaint registers were maintained for various services like electrical, plumbing, housekeeping etc. The people, who work here on maintenance of the college, will report regularly about the breakage of instruments and devices to the higher authority.

Service Department	Number of Staffs
Electrical Works	15
Civil Works	41
Transport	100
Computer Servicing	10
House Keeping	83

Maintenance of sensitive equipment, Power and Water supply:

Category	Capacity	Total Number	Maintenance (AMC
Generator for constant Power10 Supply	00 KVA – 1 No 500 KVA – 2 Nos.	4	Kirloskar Network D
	250 KVA – 1 No		
RO plant for constant Water supply	5000 LPH		Murge Company
	Quantity Required Available in each Lab	n	Logitech Twice Digitale
	Johnson (24 Person) Kone (8 Person)	2	Johnson Kone

For Computer Laboratories (Utilization and Maintenance)

Students and faculty members are provided separate login credentials to access the intranet and internet. Access to internet is provided in the lab even after college working hours. Apart from the regular lab classes, students are offered practice in programming languages by various value added courses which are under taken in the lab.

Preventive maintenance and breakdown maintenance procedure is followed so as to ensure maximum availability of the systems in the lab. Installation of antivirus and firewall ensure that the software and system is secured. A daily status check on the hardware and software condition of the machines is undertaken and the same is noted in a register. This ensures that the problem is identified and rectified at an early stage itself.

Breakdown maintenance wherein the system fails due to SMPS problem or boot failure is recorded in a register. If the problem is minor, the technical support staff of the lab will rectify it. For major failures, support from vendor is taken . Anticipating vendor support, UPS and major equipments have annual maintenance contract (AMC).

Periodic maintenance is done by regular cleaning of the lab spaces, software updates and antivirus updates.

The stock in the lab is verified for the available equipments and discarded equipments, by a meticulous

stock verification process by faculty team from other department.

Maintenance of Electrical and Electronic Equipments:-

- Regular check up of equipment is carried out at the end of every semester.
- Breakdown register is maintained in the laboratories.
- As per the requirement minor repairs are carried out by the lab assistant of faculty member.
- Maintenance of computers is taken care by IT and COMPUTER department.
- Major repairs are outsourced by following the procedure of the institute.
- The faulty trainer kits are serviced by service engineers of specified companies. The measuring instruments are calibrated regularly by standards companies.
- Stock verification is done at the end of every year by the staff members from other department and the report is submitted to the Principal.

File Description	Document
Any additional information	View Document

<u>Criterion 5 - Student Support and Progression</u>

5.1 Student Support

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

Response: 39.08

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

2016-17	2015-16	2014-15	2013-14	2012-13
2216	2131	2021	1744	1525

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

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

Response: 8.99

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

2016-17	2015-16	2014-15	2013-14	2012-13
449	460	503	434	368
ile Descriptio	n		Document	
-	n lents benefited by sc	holarships and	Document View Document	
Jumber of stud		-		
Jumber of stud	lents benefited by sc	-		

5.1.3 Number of capability enhancement and development schemes –			
1. For competitive examinations			
2. Career counselling			
3. Soft skill development			
4. Remedial coaching			
5.Language lab			
6.Bridge courses			
7.Yoga and meditation			
8. Personal Counselling			
A. 7 or more of the above B. Any 6 of the above			
C. Any 5 of the above			
D. Any 4 of the above			
Response: A. 7 or more of the above			
File Description	Document		
Details of capability enhancement and development schemes	View Document		
Link to Institutional website	View Document		

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

Response: 67.57

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

2016-17	2015-16	2014-15	2013-14	2012-13
3668	3593	3347	3136	2884

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	<u>View Document</u>

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years					
Response: 63.	2				
5.1.5.1 Numbe	er of students attending	ng VET year-wise	during the last five yea	ars	
2016-17	2015-16	2014-15	2013-14	2012-13	
3361	3195	3114	3136	2729	
			-		
File Description			Document	1	
Details of the students benifitted by VET			View Document		

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

Response: Yes

-	
File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

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

Response: 75.71

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

2016-17	2015-16	2014-15	2013-14	2012-13
1179	1097	920	919	825

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

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

Response: 5.41

5.2.2.1 Number of outgoing students progressing to higher education

Response: 77	
File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document

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

Response: 72.35

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

2016-17	2015-16	2014-15	2013-14	2012-13
49	43	50	30	29

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

2016-17	2015-16	2014-15	2013-14	2012-13
62	54	58	52	49

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

5.3 Student Participation and Activities

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

Response: 110

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

2	016-17	2015-16	2014-15	2013-14	2012-13
3	6	20	18	20	16

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

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

Response:

Every year, a Student council is formed comprising of one student representative from each Department. From the council framed one student is being selected as Student Chairman every year. The student council plays a vital role in Departmental activities such as organizing symposiums, seminars, conferences and workshops. The council members and all the other students deliberately involve in their Department newsletter preparation and in editorial committee. The student representatives also participate in the preparation of college calendar every year to plan college activities Department wise. Especially Department symposia are completely planned, organized and conducted by the students under the supervision of the faculty.

The students involve themselves in events such as college day, hostel day, Independence day,

Republic day and various club activities. Each club has several students who take on leadership roles and organize the events and get very good exposure. The student representatives also actively participate in Sports committee, cultural committee, magazine committee, calendar committee etc.

The college provides ample avenues for developing technical skills, updating knowledge, personality development and service to the society through various Associations and Societies. There is a staff advisor to guide the students in the smooth and effective functioning of the Assoiations. A student-curator team, organize TEDx- event from 2012 onwards. Every year the TEDx Sairam is aimed to plan with a theme. Exciting list of speakers address on the theme coined.

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

Response: 28

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

2016-17	2015-16	2014-15	2013-14	2012-13
29	25	38	25	23

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

5.4 Alumni Engagement

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

Response:

The alumnus forms the major strength of the institution. The Alumni Association was formed in the year 2007 under the title "Sri Sairam Engineering College Alumni Association" with the Reg. No: 220/2007. The alumni meet is conducted once in a year, where the alumni from different branches of the under graduate and post graduate programs share their views and give suggestions for the betterment of their junior students. The alumni meet is hosted by the management generously and the alumni are honored with momentos. 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 experience, knowledge and insights.

The alumni visit the institution to deliver Guest lectures and seminars for the students in their areas of expertise and motivate the young minds. Successful entrepreneurs from the alumnus are invited to talk on their success stories at various occasions of the Institute.

The alumni also help the final year students of the various streams of engineering, business administration and computer applications to get their project placements and summer internship in their companies or to assist them 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.

5.4.2 Alumni contribution during the last five years(INR in Lakhs) ? 5 Lakhs					
4 Lakhs - 5 Lakhs					
3 Lakhs - 4 Lakhs	Lakhs - 4 Lakhs				
1 Lakh - 3 Lakhs					
Response: ? 5 Lakhs					
File Description	Document				
Alumni association audited statements	View Document				

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

Response: 5

Report of the event

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

2016-17	2015-16	2014-15	2013-14	2012-13
1	1	1	1	1
File Description			Document	
Number of Alumni Association / Chapters meetings conducted during the last five years.		View Document		
Any additional information			İ	

View Document

<u>Criterion 6 - Governance, Leadership and Management</u>

6.1 Institutional Vision and Leadership

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

Response:

Vision

To emerge as a "Centre of excellence" offering Technical Education and Research opportunities of very high standards to students, develop the total personality of the individual and instil high levels of discipline and strive to set global standards, making our students technologically superior and ethically strong, who in turn shall contribute to the advancement of the society and humankind.

Mission

We dedicate and commit ourselves to achieve, sustain and foster unmatched excellence in Technical Education. To this end, we will pursue continuous development of infrastructure and enhance state-of-theart equipment to provide our students, a technologically up-to date and intellectually inspiring environment of learning, research, creativity, innovation and professional activity and inculcate in them ethical and moral values.

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

The Philanthropic Founder Chairman, MJF. Ln. Leo Muthu had the deep vision of serving the society with the motto "We build a better nation through quality education". His vision has been the heritage statement for the functioning of the institution. The Chief Executive Officer is the leader in guiding the administration of the institution and making the council of Principal, faculty and students work towards the vision of the institute. Based on the recommendations of the Governing Council, the commencement of new courses, expansion of infrastructure, implementation of strategy and other vital decisions are approved by the CEO and implementation process discussed with the Principal and Heads of the departments for execution. The top management headed by the CEO ensures that periodical meetings of the Governing Council are conducted to monitor the progress.

The institution has a perspective plan for development. Modernization of the existing facilities, implementation of new ventures for R&D, expansion of infrastructure by means of laboratories, library resources, class rooms, meeting halls and sporting facilities are the usual criteria in the annual plan of the institution. The academic plan (semester wise) is prepared by the Principal after having discussions with the HODs. The scheduling of industrial visits, conferences, workshops, seminars, FDPs, association activities, club activities, sports tournaments, recruitment and functions is done after having discussions with the HODs, conveners and team leads.

The head of the institution takes decisions in the academic frontiers in tune with the regulation of the affiliating University. Regular affairs are the periodic discussions of the Principal with the HODs as well as with the faculty. The CEO conducts regular meetings with the Principal, faculty, cells, students and

parents. Faculty meetings with the HOD play a pivotal role as the collective suggestions are well analysed later in the HODs meetings with the Principal. Principal's subsequent meetings with the top management and with the Governing Council ensure that all the information and suggestions reach from bottom to top and from top to bottom in a smooth fashion. The travel of smooth communication paves way for successful interaction, feedback, team work and new ventures. Organizational changes are effectively implemented not only based on needs but also in view of excellence.

6.1.2 The institution practices decentralization and participative management

Response:

The case study of the preparation of Academic Planner

The institution functions with the method of decentralized governance system. The head of the department has been bestowed with the authority of deciding the activities and delegating the responsibilities to the staff members. The department decides on timetable, subject allocation, purchase and maintenance of equipment and consumables, organizing conferences, symposia, guest lectures and workshops and recommends necessary industrial visits, in-plant trainings, internships and MoUs. The institution is functioning effectively with the culture of participative management which enables the faculty and students to give their opinion and suggestions for improvement. All the academic activities are decentralized and decisions are taken based on discussion and deliberations in the class committee meetings, department meetings, faculty meetings, HODs' meetings with Principal and HODs meetings with CEO. The Principal coordinates with the departments, administration and management. Participative management provides extensive scope for having collaboration among the departments and ensures the quality of planning and implementation of all the activities in the institution uniformly and as a team.

Every year Academic Planner is prepared at the closure of the previous academic year. Principal will convene the HODs' meeting. HODs, Dean, Training & Placement, Sr. Librarian and Director of Physical education will attend the meeting. The schedule of the following will be discussed and finalized in accordance with the schedule received from affiliating university

- Re-opening for the next academic year
- Working days / test days / model exam days
- Department Symposium /Association activities
- IEEE , ISTE, SAE, IETE, ISA and ISOI activities
- Guest Lectures
- Video Classes
- Industrial Visits
- Internships
- Placement Training
- Internal Quality Audit Days
- External Audit
- FDPs / Workshops / Conferences
- IQAC Meetings
- FDC Meetings
- Mini Project Exhibition III years

Project Exhibition – Final years TED x Sairam Green Kalam camp, Blood donation camp, NSS camp and NCC camp Sairam Trophy, State Level Chess Tournament and Anna University Zonal / Inter – Zonal and Inter – University Sports College Functions

Induction Day, Women's Day, Engineers' Day, Teachers' Day, Founder's Day, Shri.APJ. Kalam's birth Day, Shri Vivekanaadha birthday, Sports day, College day, Culturals and Graduation Day

The schedule approved by the Principal will be sent to CEO's approval. After receiving the approval, permission will be granted for the committees concerned for the preparation of Academic Calendar. Nearly 90% of the events as per schedule is conducted every year. The remaining percentage rescheduled due to unforeseen reasons with the approval of Principal and CEO. The prior preparation of academic planner helps in identifying resource persons for different activities mentioned and enables the management to invite celebrities for the bigger functions. Further, student club activities are designed as and when the academic planner provides the available time. Smart class rooms, Video Theatres, Seminar Halls, Placement Auditorium, Sigma Auditorium and Leo Muthu Indoor Stadium are the venues for the above mentioned activities. Separate Registers are available for booking the venues appropriate to the events.

File Description	Document
Any additional information	View Document

6.2 Strategy Development and Deployment

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

Response:

Enhancement of Infrastructure

The management council monitors the performance and the progress of the institute to ensure the fulfillment of the goals. To ensure consistency in academic excellence, upgradation of facilities in needed spheres is the standard agenda in the council meetings. Resolutions are made as per requirements and they are implemented to enrich teaching - learning process in a broader perspective.

The institution had a humble beginning with one main block and year after year the institution is witnessing upward journey in creating and expanding infrastructure facilities. The institution is now functioning with thirteen main blocks. At Sairam, the quality of student experience is our main priority. We seek to ensure that our students benefit from a high quality learning environment that includes spacious classrooms, well-equipped laboratories, state-of-the-art computing facilities, rich and diverse knowledge resource centres, smart class rooms, video theatres, seminar halls, auditoriums, first class sporting facilities with indoor and outdoor complexes, practice and rehearsal halls for cultural activities, feel at home hostel accommodation facilities and extensive facilities for on-campus training and placement. At Sairam, quality education is more than a philosophy, it is the very essence of our existence.

Self Study Report of SRI SAI RAM ENGINEERING COLLEGE

With the intension of providing ample avenues, enhancing the infrastructure facilities by means of construction of new blocks, class rooms, laboratories, auditoriums, and library facilities have been in the agenda of the continuous process. Though the needed facilities are in place as per requirements and the recommendations of the affiliating university, they are enriched with the aim of fulfilling the goals in the strategic plans which go beyond the syllabus as well to make the student fraternity not only thorough professionals but also responsible citizens who can contribute for the development of the society and the nation. The quest for enriching the facilities goes beyond the mandatory facilities to execute activities like a few cited below.

- Entrepreneur Development Cell (EDC)
- Higher Education Cell (covers area/ classrooms for training for UPSC Exams, GRE, TOEFL and others)
- Centre for Soft Skills and Latest Trends
- Club Activities Discussion Rooms
- Practice Rooms / Green Rooms (for Boys and Girls Separately)
- Retiring Rooms (for Boys and Girls Separately)
- Smart Class Rooms
- Video Theatres

The enhanced infrastructure from the year 2012 to 2016 has been stated below.

S.No	Blocks	No. of Floors	Year of Completion	Α	rea ir
1.	Extension building	G+1	2012	50	084.00
2.	Dining hall for hostel	Ground	2012	50	00.00
3.	Transport building & Shed (Light roofing)	tG+1 & G	2013	3(00.00
4.	G Block	G+5	2014	47	7390
5.	Construction of Mech. Blocks (I, J, K, L & M)	G+3	2014	14	49746
6.	Parents resting hall for Girls hostel	1	2015	48	800.00
7.	Construction of Shri. Leo Muthu Indoor stadium	rG+3	2015	22	24345
8.	H Block	G+5	Nearing Completion	47	7390.0
9.	Library Extension Block (G)	G+3	Nearing Completion	11	18821

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

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

grievance redressal mechanism

Response:

The receptive management stands as an asset to the system and stakeholders. The Governing Council takes the responsibility of monitoring the implementation of activities in the institutional strategic plan. Though a few vital goals are achieved within a short span of time, the council of top management, HOI, HODs, teaching, non-teaching, students and stake holders work as a team to reinforce the culture of excellence. "We build a better Nation through Quality Education" being the motto of the institute, excellence in every sphere is ensured not only through the mission and strategies but also in various programmes executed. The below is the list of pivotal activities.

- Adopting procedures for contemporary teaching learning processes
- Monitoring the procedures and Progress by the HODs & HOI
- Analyzing the feedback from students, Parents and experts
- Understanding the above said feedback and improving services

Continuous and meticulous efforts are ensured to maintain quality in both academic and administrative levels. Every year ISO audit is conducted and subsequently recertification is granted. The branches of CSE, ECE, EEE, IT, ICE, MBA, MCA & Mechanical Engineering have been NBA accredited; gearing up for reaccreditation while other branches are applying for accreditation by NBA.

Principal is the chairperson of administrative and academic activities of the institution. Heads of the departments take the responsibility of heading all the administrative and academic activities of the department. The HODs possess both the academic and the financial autonomy in accordance with all academic aspects. They are entitled to take decisions as per the needs of the situations in exigencies and get them ratified by the Head of the Institution subsequently at a later stage. The Principal, HODs and Team leads are sanctioned imprest amount, for seeing the execution of multiple events scheduled. Based on the experience and the expertise of the faculty members, team leads have been identified to lead different teams which are functioning effectively. They can act spontaneously for moulding / grooming the members of their teams and they have been identified as second rung leaders.

Recruitment of teaching, non teaching and office administration staff is planned at the end of every academic year as per the requirements of the next academic year. Staff appraisal system is in existence in tune with the promotional policies. The grievance redressal mechanism helps us to serve better by understanding the expectations.

File Description	Document	
Any additional information	View Document	

6.2.3 Implementation of e-governance in areas of operation

Planning and Development
 Administration
 Finance and Accounts

4. Student Admission and Support

5. Examination

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: A. All 5 of the above

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

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

Response:

With the leadership of the Principal, every committee will be assigned with specific tasks pertaining to the requirements of conducting college functions. Heads of the committees monitor the works. A minimum of two meetings will be held prior to the function in the presence of CEO, Principal, HODs and Committee heads. The committees constituted are not permanent. Members are reshuffled for change of committees for different functions. This enables the members getting familiarized with any kind of activities related to any function. The conduct of functions fosters relationship and nurture unity.

The following is the minutes of the meeting held for the successful conduct of 18th Graduation Day on 06.07.2017

- Chief Guest AICTE Chairman
- Online Registration will open shortly
- Buses will be available from Tambaram from 11.30 a.m. onwards
- Reporting Time 12.30 p.m., Registration Desk will be open from 12.30 p.m. to 2.30 p.m. Event will be started from 3.00 p.m.
- Mentors to be follow up the Online Registration
- UG-1099 Students, PG 243 Students
- Committee list will be sent
- Students have to pay advance of Rs. 1000 (500 will be Refundable)

In the academic year 2016-17, the 18th Graduation Ceremony was organized on 22.07.2017, Prof. Anil Dattatraya Sahasrabudhe, Chairman, All India Council for Technical Education, New Delhi graced the occasion as the Chief Guest.

The following committees were constituted for the successful conduct of the 18th graduation day and the committees were entitled to execute the tasks as discussed in the minutes of the meeting held on 6.07.2017 in the HODs meeting with Principal.

- Reception Committee: Receiving the Chief Guest and invitees
- Guard of Honour: Chief Guest will be given guard of honour by NCC contingent
- Helpdesk: Registration Work
- Stage Arrangement : Stage Decoration
- Graduands Robe Committee: Robe distribution
- VIP Robe: To enable the guests getting robed for the ceremony
- VIP Hospitality: Taking care of the VIPs
- Award of Certificates: Distribution of certificates
- Medals and Gifts to the Rank Holders: Presentation of Management gifts
- Catering Committee: Taking care of food services to graduates, parents and guests
- Transport Committee: Taking care of transport facilities as recommended in the minutes of the meeting
- Banners / Photography / Video, Press & Publicity: Bringing visibility and publicity
- Seating Arrangement & Discipline: confirming the participation (out of UG-1099 Students & PG 243 Students with their parents and relatives)
- Announcements & Scheduling: Coordinating the program

The following sequence of activities was done after constituting the committees.

- Conducting meetings for the committee heads with members
- Circulation of the Minutes of the Meetings among the members of the committees
- Execution of activities as planned
- Successful conduct of the function

File Description	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 measures for teaching staff

- Free transport facilities
- Waiver of fees upto for teachers' children in the Institution

- Medical leave and Maternity leave
- Supporting for education of the children of the teachers in the group institutions
- Medical Support from our Indian Medical Systems
- Marriage gifts with the sanction of one week leave
- Cab facilities for Heads of the Department and senior faculty
- Gifts and mementoes during Teachers' Day celebrations
- Sponsoring for attending conference, workshops and FDPs
- Incentive for publication of papers / research articles
- Reward for producing University Ranks
- Cash awards for academic excellence / 100% pass
- Special Study Leave (SSL) to pursue higher education
- Family Get togethers
- Subsidiary canteen fare for teachers
- Group Insurance

Welfare schemes for non-teaching staff

- Educational support to the children of the staff
- Marriage gifts with the sanction of one week leave
- Granting medical leave / maternity leave
- Medical Support from our Indian Medical Systems
- Free tansport facilities
- SSL for higher studies
- Incentive for attending orientation programmes, workshops and conferences
- Gifts during Teachers' Day celebrations
- Family Get togethers
- Incentive for dress materials for non-teaching staff
- Incentive for vehicle utilization or transport allowance for non-teaching staff
- Incentive for dress materials for housekeeping staff
- Subsidiary canteen fare for non-teaching staff
- Group Insurance

File Description	Document
Any additional information	View Document

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

Response: 13.71

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

2016-17	2015-16	2014-15	2013-14	2012-13
46	35	47	53	57

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

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

Response: 18.4

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

2016-17	2015-16	2014-15	2013-14	2012-13
24	14	20	21	13

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

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

Response: 52.4

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

2016-17	2015-16	2014-15	2013-14	2012-13
228	203	182	170	145

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

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

Response:

The management evaluates the performance of the faculty based on teaching, research, participation in teamwork, arranging co curricular and extracurricular activities and publication works. They are awarded and appreciated during teachers' day celebrations. The appraisal system motivates the staff to excel and put forth the best of their efforts. Staff retention is one among the strengths of the institution.

The following factors are deeply analysed in the appraisal system for teaching staff

- Experience
- Skill upgradation through participation in Conferences, Workshops, Faculty Development Programs and others
- Innovative teaching practices
- Pursuing higher studies (Ph.D, PDF)
- Research activities and obtaining patents
- Result percentage produced in the University Examination
- Publication works in the Scopus indexed / impact factor / e journals & conference proceedings
- Publication of chapters in books and publication of books
- Carrying out sponsored projects
- Mentoring and Counseling methods
- Feedback from HOD and Principal
- Feedback from students
- Establishing rapport with peers
- Active participation in team work
- Undertaking new academic ventures and being team leads
- Rewards for outstanding achievements in their studies pursued after joining the institution
- Attending specific conferences / workshops / training programs related to cells and clubs, for which they coordinate as team leads
- Awards and Rewards for being good academician state and national level
- Community service through the institution and outside the institution
- Participation in conducting extracurricular activities

The following factors are	a daanly analy	used in the approical	system for non	teaching staff
The following factors are	cucepty anal	yseu in the appraisai	system for non-	icacining starr

- Experience
- Skill upgradation through Orientation Programs, Refresher Course, Short Term Courses and Faculty Development Programs
- Higher Studies
- Feedback from HOD and Principal
- Active participation in team work
- Work Discipline
- Outstanding Achievements in their studies
- Participation in Community services

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Internal Audit is performed by officials deputed from Trust office periodically and the reports are obtained before conduct of the external audit which is normally done after the closure of the accounts in all respects. External Audit is done by the Statutory Auditors after 30th June of the subsequent year.

During the course of Internal Audit, all required steps are taken to regularize the accounts and to obtain confirmations for the credit balances, to collect documentary evidences wherever inadequate in respect of payments, compliances of T.D.S. and Statutory Formalities and Reconciliation of Unit wise balances with the Control Accounts and Bank Reconciliations. The copy of the Internal audit report covering all matters related to maintenance of accounts is preserved.

Subsequently, External Statutory Audit is conducted by the auditors and the final audit report with audit findings are submitted to the Management. The consolidation of the findings of the Institutions with Trust Central office has been completed and the annual returns have been submitted to Income tax Authorities, Registrar of Societies, Tamil Nadu and to the other relevant authorities concerned.

File Description Document	
Any additional information	View Document

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

Response: 93.77

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

2016-17 2015-16	5 2014-15	2013-14	2012-13	
20.65 18.19	20.60	16.43	17.90	

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

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

Response:

Mobilization

Fees Collections

Students are admitted as per the Tami Nadu Government prescribed Higher Education norms by admitting 65% of students through Anna University Counseling (TNEA) and 35% through Consortium of Self Financing Professional, Arts and Science Colleges in Tamil Nadu. The latter kind are admitted with the Fees higher than Government Quota students.

Term Loan and Hire Purchase Loans

Institute is getting above Loans from Banks with reduced rate of interest by maintaining the liquidity, DSCR and Debt Equity Ratios which are sound and the Loans are availed through Sapthagiri Educational Trust.

Government Grants and Sponsorship Receipts

Institute is getting Grants from various Government Bodies i.e. AICTE, IEDC, DST, Ministry of Drinking water and sanitation and Entrepreneurship Development in Indian Encouraging Trends etc. and the grants are judiciously utilized to meet the recurring and non recurring cost.

Non Government Bodies and Sponsorship Receipts

Donations are received from well wishers (alumni and others), industries, individuals and philanthropists for institutional activities.

Corpus Donation of Trust and Trust Contribution

The College is functioning under the Sapthagiri Educational Trust at Sai Bhavan, No.31 Madley Road, T. Nagar, Chennai -17. The Trust gets corpus donations from well wishers, corporates and philanthropists.

Optimal Utilization

Recurring Expenses

Salary to staff, academic activities and payment of bank interest are done with fees collection.

Infrastructural development facilities and Building construction works

Management allocates budget to create and upgrade the infrastructural facilities in tune with the modern trends and for construction works. Bank loans and corpus donations received from well wishers and philanthropist are judiciously utilized for the same.

The institute gets grants from AICTE for purchase of modern lab equipments, purchase of latest version software and others. The grants are utilized.

College purchases new vehicles as per student strength, through hire purchase loans from banks and loans are repaid with reduced rates of interest from the reasonable transport charges.

Research and project activities

Knowledge is generated and applied in new innovations and technologies which in turn shall be utilized to enhance the quality of socio-economic and environmental conditions of society. The institute is committed to provide excellence in research. The institute has executed many major Research and Development projects. Donations from government and non government bodies, institutions, industries, firms, well wishers and philanthropists are used for R&D.

Seminars, Conferences and Faculty Development Programmes and other co-curricular

The institute conducts the above said regularly and religiously matching with the latest technology, innovations, research, changes and needs for the society.

Extra-curricular activities

Modern sports complex has been created to provide ample opportunities for conduct of sports and enabling student participation.

Green Atmosphere

Enough care is taken to maintain cleanliness in the campus which coexists with godliness and fund is judiciously utilized.

Bio-waste management expenses

The institute utilizes the policy of bio waste management effectively as it provides revenues.

File Description	Document
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:

Introduction of three question paper per course

- The IQAC focuses on the continuous improvement of the examination system for the students.
- There is a centralized examination cell to conduct the unit tests and the model examination (Unit test for a period of 1hour and 30 minutes with 50 marks and the model examination for a period of 3 hours with 100 marks).
- The examination cell has been functioning effectively and the staff handling the subjects prepares one question paper for each subject and hands over the same to the examination cell, examination cell allots the invigilators and the invigilators in general are from different departments.
- After monitoring the progress of the students, the management introduced a re-test procedure for slow learners; a separate question paper is prepared for retest and the slow learners are thus given another chance to improve performance.
- This system is being further improved by the recommendations of the IQAC cell and currently, there is a practice of submitting three question papers per course by the staff handling the course to the examination cell.
- The examination cell in charge select one of the three question papers at random and the same is given on the day of unit tests, model examination and from the remaining two one is chosen for the corresponding retests.
- The preparation of multiple question papers for one course with a few repeated questions enables the students getting exposed with more number of possible questions for their end semester examinations, which in turn improves their performance in the university examinations.

Pre Final year and Final year project exhibition

- The management is very much concerned about the quality of projects the students undertake during final year.
- The IQAC suggested that the students can plan their projects in the pre-final year. A mini project exhibition is conducted by the departments of CSE, ECE, ICE, E&I and IT in the sixth semester.
- For the mini project the students have to present two reviews and marks are awarded by the project guides for the reviews. It has been made compulsory for all the students to undertake a mini project, even though it is not a part of the syllabus of the affiliating University.
- The third review is presented by the students in front of the judges and prizes are distributed for the winners during the mini project exhibition. Prizes include merit certificates and cash awards and participation certificate for all participants.
- This is an initiative taken by the IQAC for doing a quality project in the final year. Apart from this mini project exhibition, there is a project exhibition in the eighth semester in which the students of all departments exhibit their projects.
- Experts are invited from Industry and Academic institutions to judge the projects exhibited by the students. First three prizes are awarded for each department and this creates a healthy competition among the students and to go for socially relevant and innovative projects.

File Description	Document
Any additional information	View Document

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

Response:

Content beyond the syllabus and Skillrack online programming

- The teaching learning process is continuously monitored and reviewed by the Head of the departments and reported to the Principal and the management.
- Apart from the regular class room lectures by the faculty members for each course, students are given opportunities to attend the guest lecture from industrial experts in the smart class rooms.
- The contents of this type of lecture are beyond the syllabus and they expose the industry requirement to the students. This lecture facilitates the students to know in depth about the industry requirement and the necessary skills they should equip with for placement.
- The interactions with industrial experts narrow down the gap between the institute and the industry requirement which helps the management in identifying the necessary soft skill development required for the students.
- Placement training through online tests by Skill rack is an online programming introduced by the management with a view to help the students for better placement.
- Faculty members are trained on the same before implementing it to the students. Skillrack is an initiative facilitated by IQAC with the support from TAP cell.
- Guest lectures on content beyond the syllabus and Skill rack introduced by the management are the outcomes of IQAC which are well supported by the management.

Video Classes and NPTEL online courses

- Other than smart class rooms lectures, videos are played for specific topics beyond the syllabus but related to the latest technology in the respective domains.
- Through these video classes students are exposed to have a thorough understanding of the processes through visual means with maximum impact and this encourages them to focus on their project work too.
- The students show much interest in the videos played in the video theatre and the response by the students to the question session post video session is very interactive.
- A regular schedule for proper utilization of the video theatre indicating the date, time, branch and year of study is prepared at the beginning of the semester, so that all the students are benefited through video sessions.
- The students and faculty members are encouraged to register for the NPTEL (National Programme on Technology Enhanced Learning) online courses initiated by IITs and IISc. If a registered candidate (staff or student) scores above 80% in the final examination, the management repays Rs.500/- and Rs. 1000/- for those who score more than 90% towards the examination fees paid by them.
- This is a very good motivation from the management to the staff and students. The idea of repaying the fees is put forward by IQAC to the management.

• The IQAC is instrumental in implementing new ventures for enabling the learners, acquiring knowledge beyond the syllabus.

File Description	Document
Any additional information	View Document

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

Response: 8.8

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

2016-17	2015-16	2014-15	2013-14	2012-13
7	7	10	11	9

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

6.5.4 Quality assurance initiatives of the institution include:

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

A. Any 4 of the above

- **B.** Any 3 of the above
- C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

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

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

Response:

- The growth of infrastructure in the last five years has been upward. New indoor stadium for sports, closed auditorium with a seating capacity of approximately 5000 students, video theatres are a few to be stated.
- Involvement of students in sports activities. Our students continuously have bagged the Anna University Zonal title, winning the Championship Award for the record 7th consecutive time (2011-2017). SAIRAM TIES 2015 was hosted in our campus with a participation of 200 colleges from all over Tamil Nadu.
- The IEDC was initiated for promoting students' research interest. Projects are funded by IEDC of DST and five of the projects initiated through IEDC is funded by the management in every academic year in addition to five projects sponsored by IEDC.
- Students are encouraged to participate in Hackathon conducted by MHRD.
- There is a continuous increase in the number of University ranks year on year and Sairam Engineering College has bagged the highest number of university ranks among the Anna University affiliated colleges for the past three consecutive years.
- Regular/Periodical conduct of International Conferences/National Conferences and workshops.
- Introduction of Mentor books for students counseling.
- Getting digitalized in more number of academic operations
- Identifying best practices and implementing the same, year after year, as a team from top management to bottom level discussions.

File Description	Document
Any additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response: 16

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

2016-17	2015-16	2014-15	2013-14	2012-13
5	3	3	3	2

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

7.1.2

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

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

Response:

Gender Sensitivity

The institution aims to groom students to be self-reliant, specialists in their chosen discipline, continuous learners, effective communicators, respectful of different cultures, 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. Departments headed by Women are almost equal to the other departments. Female teaching and non-teaching faculty are more in number than the other gender. Similarly, the number of women in the administrative and housekeeping departments are high. The college has installed closed circuit (CC) cameras to monitor the security and safety of the girl students. The college

has an exclusive club for sensitizing both staff and students to gender named as WoWWW (Women of Worth, Wonder, and Wise). It plays a proactive role in sensitizing young minds towards gender issues by involving them in various activities. The club organizes events like interactive talks and lectures on sensitive and critical gender issues like social malpractices, equality of sexes, women safety, health, promoting Women Entrepreneurs, self-defense for girls etc. The women club activities are planned, organized, and executed by a committee comprising of 25 girl students representing all the departments with the guidance of the faculty. Apart from WoWWW club, there are other student clubs vibrant in the institution comprising both the gender. Stereotypes of gender roles are broken and students of any gender are allowed to take up their membership, roles, and responsibilities of their interest in the clubs. Themed events are conducted emphasizing gender issues are conducted to instill awareness among the students. "Sai Carnival" - 2016 the cultural event of the college was based on the theme of WOMEN EMPOWERMENT. Every year there is a huge celebration of women's day and inspiring women personalities are invited to share their life experiences. A complaint 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 and are encouraged to approach any faculty or WoWWW club for their grievances. Our on-site counseling system provides support to the girls and enables them to understand and resolve their problems. The college has a big common room, with tennis boards and carom boards for the recreation of students separately for boys and girls.

7.1.3 Alternate Energy initiatives such as:

1.Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 9.23

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

Response: 144000

7.1.3.2 Total annual power requirement (in KWH)

Response: 1560000

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

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 69.97

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

Response: 147.2

7.1.4.2 Annual lighting power requirement (in KWH)	
Response: 210.368	
File Description	Document
Details of lighting power requirements met through LED bulbs	View Document

7.1.5 Waste Management steps including:

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

Response:

The total solid waste collected in the campus is 20 Kg/day on an average, from tree droppings, cups, paper etc. The waste is segregated at source by providing separate dustbins for Bio-degradable and Plastic waste. Single sided used papers are reused for writing and printing in all departments. Less plastic waste (average 0.1Kg/day) is generated by few departments, office, etc., it is collected and given to the vendor on a regular basis. Metal and wooden waste is stored and given to authorized scrap agents for further processing. Glass bottles are reused in the laboratories. The food waste is converted into biogas and is again used for the kitchen. Sanitary napkins are disposed of using incineration process. Use of personal mobile phones, Memory cards etc. are prohibited in the campus. E-waste from labs is properly collected and is given to the licensed recycler, reused wherever possible, donated and sold if possible. Non-working computers, monitors, and printers are discarded and scrapped on a systematic basis. Some parts useful for other systems are kept aside for future use. Students are also imparted awareness and education about E-Waste. Our institute has a CII E-Waste Collection center and they collect a considerable amount of E-Waste.

File Description	Document
Any additional information	View Document

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

There is great demand for water in an engineering college for laboratories for use in experiments, drinking facilities, cleaning purposes, for horticulture purpose etc. Well, and Ponds are the two major sources of water. Water is used for drinking purposes, canteen, toilets, laboratory, and gardening. The institute ensures that the water wastage is minimized at an optimal level and the leaky taps and pipes are under regular check and hence no loss of water is observed, neither by any leakages nor by overflow from overhead tanks. On an average, the total use of water in the college is around 20,000 L/day on an average, which includes 5,000 L/day for domestic purposes, 10,000 L/day for gardening and 5,000 L/day for

different laboratories. The college has implemented rainwater harvesting (RWH) within its campus for storing and reuse and it has reduced its dependence on water tankers, saving lakhs of rupees every year. The water is treated in RO plant which has a capacity of 2000 lt/h. Gardens are watered using drip/sprinkler irrigation system to save water. Displays of signboard and posters are done for the creation of awareness in Hostels and College campus.

File Description	Document
Any additional information	View Document

7.1.7 Green Practices

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

Response:

The institute is a Green campus, plush, serene, with landscaping. The students and faculty are encouraged to plant more trees and making the campus garbage and plastic free zone. Swacch Bharat Abhiyan Club at our college takes care of maintaining the campus clean. The campus is located amidst a reserved forest with approximately 80 types of trees. Tree plantation programs, helps in encouraging eco-friendly environment, which provides pure oxygen within the institute and awareness among the villagers. The Illumination and Ventilation in classrooms are adequate considering natural light and air velocity present. The noise level in the campus is well within the limit i.e. below 50 dB at daytime. The installation of solar panels, paperless work system, and composting practices are noteworthy. College transportation facilities are used to commute. Students residing near the college use bicycles or walk to the college. The College makes the student aware of the Carbon Credits, Carbon Neutrality in the subject of Environmental Studies in the programmes. Emission test certificates are mandatory for the vehicles in the campus. Tobacco products are strictly banned within 2 kilometers around the campus. The chimney in the kitchen produces carbon and other carbon pollutants. Regular cleaning ensures carbon neutrality.

File Description	Document
Any additional information	View Document

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

Response: 0.94

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

2016-17	2015-16	2014-15	2013-14	2012-13
45.99	25.99	68.02	25.75	20.31
	·	· · ·	· · · · · · · · · · · · · · · · · · ·	
			1	
File Descriptio	n		Document	
F ile Descriptio Green audit rep			Document View Document	

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:		
 1. Physical facilities 2. Provision for lift 3. Ramp / Rails 4. Braille Software/facilities 5. Rest Rooms 6. Scribes for examination 7. Special skill development for differently abled students 8. Any other similar facility (Specify) A. 7 and more of the above B. At least 6 of the above		
C. At least 4 of the above		
D. At least 2 of the above		
Response: A. 7 and more of the above		
File Description Document		
Resources available in the institution for Divyangjan	View Document	
Any additional information	View Document	
link to photos and videos of facilities for Divyangjan	View Document	

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

last five years

Response: 14

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

2016-17	2015-16	2014-15	2013-14	2012-13
4	3	2	3	2

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

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

Response: 55

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

2016-17	2015-16	2014-15	2013-14	2012-13
23	10	9	10	3

File Description	Document
Report of the event	View Document
Details of initiatives taken to engage with local community during the last five years	View Document
Any additional information	View Document

7.1.12

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

Response: Yes

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

7.1.13 Display of core values in the institution and on its website		
Response: No		
File Description Document		
Provide URL of website that displays core values	View Document	

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

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

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

Response: Yes

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

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

Response: Yes

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

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

Response: 34

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

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

Response:

Our students are on a mission towards better India. They come together breaking the boundaries of religion and caste. The institution celebrates Days of National Importance like Independence Day and Republic day with fervor and festivity. Death and Birth anniversaries of great personalities, Important Days of National and International events are also celebrated meaningfully. The institution celebrates these days of national importance to recall the events or contribution of our leaders in building the nation. Thoughts of great Indian personalities sowed into the young minds through the exhibitions and programmes conducted on these days. Every year Teachers day is celebrated on September 5th recognising the contributions and achievements of teachers, Engineers day on 15th September, to celebrate the contribution and achievements of Engineers and inculcate a sense of pride is religiously celebrated. The institute also conducted a massive plantation campaign to mark the birth anniversary of Swami Vivekandha and a youth summit was organized in remembrance of Dr. APJ Abdul Kalam to foster and encourage innovation in the young minds.

File Description	Document
Any additional information	View Document

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

Response:

The institution maintains transparency in its financial, academic, administrative, and auxiliary functions in a very clean and fair manner. Ethical and responsible conduct permeates the institution, from its financial functions, through its academic and personnel policies, to its varied auxiliary functions. To ensure that the institution operates transparently and openly in all activities, it develops and updates policies. College has a dynamic history of policy review/revision that reflects the institution's ongoing commitment to integrity

and ethical actions. It has managed to improve faculty and staff salaries in the past ten years. Every transaction is through bank and a receipt is promptly issued whenever it is necessary. The receipt and payments are done through bank. The disbursal of scholarships and other monetary benefits to the students is done through banks. The institution endeavors to ensure all financial transactions, reports and documents are completed with integrity, and that the institutional mechanism for monitoring the effective and efficient use of financial resources is the Financial Committee consisting of Trustees. The Committee is assisted by the experts to finalise matters relating to fee structure and the budget provisions of the college. Actual day-to-day financial transactions are tracked by the Principal, Trustee, Manager (for approvalsand the Accounts Officers (for Cross Verification and accounting). The institution has appointed external auditors, who regularly audit the accounts. The governing council monitors every academic activity of the college. Auxiliary functions are conducted in a transparent way. For this purpose, decisions are taken in staff council meetings. All circulars regarding, students, teaching staff & non teaching staff are circulated, read in all the classes & displayed on the notice boards. Unique student id's are given to each student and official communication are done through the same.

7.2 Best Practices

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

Response:

7.2.1.1 TITLE: OF THE PRACTICE: EDUMATE – E-ACADEMIC PROCESS AND PROGRESSIVE MANAGEMENT SYSTEM

7.2.1.2 OBJECTIVES OF THE PRACTICE: Edumate system mainly helps the Management and Principal to monitor the progress and performance of the faculty and students.

7.2.1.3 THE CONTEXT: Edumate maintains digital records of students and faculty like personal details, tests, model and university exam performance, daily attendance, OD, counseling minutes and curricular, co-curricular and extracurricular achievements and activities.

7.2.1.4 THE PRACTICE: Every activity of the faculty and students are continually updated. Being an online portal, retrieval and updating of information is convenient. Updating Edumate is considered as an integral part of the academic process.

7.2.1.5 EVIDENCE OF SUCCESS: Monitoring and tracking of student's performance is enabled using Edumate. Reports can be generated at any instant and allows slicing and dicing of information pertaining to their performance.

7.2.1.6 PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED: Damage to the hard disk or CPU is a problem and is addressed by frequent back-ups. The software may slow down the process and the software has to be updated regularly. Delay in updating leads to ambiguity. Authorization and authenticity has to be monitored closely.

7.2.2.1 TITLE OF THE PRACTICE: STUDENTS MENTORING SYSTEM

7.2.2.2 OBJECTIVE OF THE PRACTICE: The goal is to establish a trusting relationship between the Mentor and the Mentee and to help the mentees attain their aims.

7.2.2.3 CONTEXT: The students are assigned to faculty mentors from their first year. Mentors create a better environment for their mentees and the mentees can approach their mentors for educational, personal guidance and knowledge enhancement.

7.2.2.4 PRACTICE: The mentors closely monitor their mentee performance and provide an ongoing support. They also provide awareness and guidance about competitive examinations and courses required for placements. A mentor encourages the students for pursuing higher studies and encourages entrepreneurship. Each and every detail regarding the student is noted down in their mentor book to maintain a hard copy for reference. Frequent counseling sessions help the student in expressing their opinions and problems with ease. Counseling is done after tests and after the University exam Results. Mentor books are updated with their results, achievements, certifications, attendance, scholarships and project details.

7.2.2.5 EVIDENCE OF SUCCESS: The evidence of success is the percentage of students passed in five years from 2012 to 2016 academic result, number of students placed in the campus recruitment and number of students who got Anna university rank in last five years. After implementing the practice there is an increase in the Pass percentage, the number of Rank holders and Placement record

7.2.2.6 PROBLEM ENCOUNTERED AND RESOURCES REQUIRED: In some circumstances, an introvert student might not be able to express. In the absence of a mentor for a brief period of time, the duties are handed over to another faculty and informed to the respective students. To make the mentoring system effective, training is imparted to faculty on counseling and handling the students.

File Description	Document
Any additional information	View Document

7.3 Institutional Distinctiveness

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

Response:

The primary objective of the institution is the pursuit of Academic Excellence and Placements. The institute also aims at vitalizing the learning skills with a focus on futuristic demands, vitalizing teaching-learning process, ICT, Human Values, and functional relationship with all the stakeholders for the holistic development of the individual and society. It also strives to create virtuous, meritorious personalities and to prepare professional, creative, and humane students to serve the humanity by setting a commendable tradition of initiative and imagination. The institution stands apart from all other colleges by placing greater emphasis on producing professional students by providing value-based education and enabling the students to face challenges in modern life. The institute aims at instilling a sense of self-discipline and accountability among students and developing a respect for democratic, ethical, and moral values. The

college provides the best amenities required for students to enhance their Technical skills, Academics, and Extra-curricular activities and brings out the best in them. The college is ranked within the Top 10 Engineering colleges in Tamilnadu, since the time Anna University started announcing the rankings consistently; the college produces more than 92% results consistently with a total of 1054 university ranks including 29 Gold Medals since its inception. Scholarships with a total worth of nearly Rs.50 lakhs are awarded to meritorious students every year. The placement cell "TAP CELL-TRAINING AND PLACEMENT" is an integral part of our institution, ensures that the students are well trained and prepared to face their campus interviews effectively. The Placement cell has adopted an effective communication system - "CAMPUS INTERACTION PORTAL" to keep the students informed about potential job opportunities and guide them from time to time. Training is imparted to the students from their second year in soft skills and technical skills. The academic and placement processes are complemented with a diverse array of opportunities provided to the students in enhancing their knowledge beyond academics. Various conferences, guest lectures, workshops, summit, celebrity chats are organized throughout the year, by which the students are exposed to the outside world work ethics and all the recent developments and innovations. Students are encouraged to develop their own projects that are funded by both the State and Central Government of India to help them explore their creative ideas. To bring out the concealed talents of the students every year the institution conducts "SAI CARNIVAL", cultural extravaganza. This event throws light on various arts and thus pushes the students to excel in Co-Scholastic areas as well. The institution has provided the best possible facilities in terms of infrastructure for teaching, learning and sports activities to make a student, complete in all dimensions. The Classrooms, Laboratories, Smart classrooms, Group discussion halls, Library, Solved Question bank for all the subjects and Administrative office are highly conducive to the overall academic environment. The institution hosts fully equipped grounds for athletics, tennis, basketball, indoor badminton courts, and volleyball courts. As a result, students have performed well in state and national level sports events and secured many medals.

File Description	Document
Any additional information	View Document

5. CONCLUSION

Additional Information :

- SSEC ranked first among all engineering colleges affiliated to Anna University.
- 236 university ranks and 29 Gold Medals in the year 2016.
- Obtaining the highest number of ranks each year since 2012.
- A record of more than 90% placements for the past 10 years.
- Organised a Youth Innovation Summit 2017 on 9th April 2017- a National Level Project Competition for Engineering Colleges all over the country under the title of "Dr.APJ.Abdul Kalam Innovation Ecosystems".
- Hosted the 30th TIES 2015 (Tamil Nadu Inter-Engineering Sports) which was inaugurated by the eminent cricketer Mr.Sachin R.Tendulkar. More than 204 teams from Engineering Colleges all over Tamil Nadu participated .
- In 2013, our NCC cadet, Ms.M.Soundarya, (III year EEE) was the commander of the Tamil Nadu contingent during All India Vayu Sainik Camp which won the Gold Medal in drill competition under her leadership.
- In 2014, our NCC cadet, Ashwini Seeniraj (III year EEE) was selected to attend RajPath Drill Contingent on the Republic Day at RajPath, New Delhi. She also received a Trophy from the Prime Minister on behalf of the Tamil Nadu NCC declared as the best Directorate during that year.
- 17 Blood Donation Camps organized by NSS since 1998.
- "Best NSS volunteer" awards each year, for the past six years.
- Awards for mobilizing more than 2000 units of blood each year, for the past ten years.
- "Best NSS Programme Officer" award from Anna University.

Concluding Remarks :

Right from its inception in 1995 with just three branches of undergraduate Engineering courses, the Institution has grown leaps and bounds both in its size as well as stature till this day and promises to continue in its progressive mode of placing at the hands of our nation , Engineers with knowledge, skill as well as human values. The Institution has been constantly refining its focus as well as modus operandi in achieving the Vision it has set for itself. The descriptive summaries and the accompanying data under each criterion are a proof of the sincere efforts of the Institution in this direction. It is a firm belief as well as the perception of the Management of this Institution that the growth in infrastructure, academics, research, co-curricular and extracurricular activities, activities on social and national issues for creating awareness as well as mitigating the problems, contributions in terms of activities of relevance to local community around the Institution - have all been in keeping with the expectations of NAAC - a wing of the UGC, highly relevant to the present-day educational scenario in the country.

As such, it is humbly submitted that this Institution, SRI SAIRAM ENGINEERING COLLEGE, West Tambaram, Chennai deserves to be accredited well by NAAC.

This accreditation will also be a mile-stone in its chronological history as well as serve as a great moralebooster in accelerating its growth towards its nation-building efforts through Engineering education.