

FOR

3rd CYCLE OF ACCREDITATION

SRI VENKATESWARA COLLEGE OF ENGINEERING

POST BAG NO.1, PENNALUR VILLAGE CHENNAI - BENGALURU HIGHWAY, SRIPERUMBUDUR (TK)

602117 www.svce.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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<u>1. EXECUTIVE SUMMARY</u>

1.1 INTRODUCTION

Sri Venkateswara College of Engineering, commonly referred to as SVCE is managed by Sri Venkateswara Educational and Health Trust (SVEHT). The Trust was founded in 1984 at the behest and benign blessings of His Holiness Sri Jayendra Saraswathi, the pontiff of the renowned Kanchi Kamakoti Peetham. The Chairman of the Governing Council of the institution, Dr. A. C. Muthiah, is a renowned Industrialist with experience in establishing and governing many reputed organizations like the Southern Petro Chemical Industries Corporation, Tamil N?du Petro Products, Tuticorin Alkali Chemicals etc., and is actively involved in philanthropy post his retirement. However, he continues to share his expertise and experience in the technical aspects as well as in Governance and Administration by way of being a board member and taking part in all the meetings of SVCE and many other organizations.

The college is located in a 93-acre Campus closely located to the industrial belt of Chennai and adjacent districts, which is commonly referred to as the "Detroit of India" on account of the presence of many industries associated with the automotive sector like Hyundai, Ford, etc along with their vendors.

In spite of non-availability of ground water, the campus is lush-green with a lot of flora and associated fauna, which is a result of strategic planning and execution of projects related to eco-conservation, especially pertaining to water.

The campus displays architecturally exquisite buildings with ample infrastructure such as classrooms, laboratories, libraries, sports arena, canteen, hostels, dispensary, etc., Academic activities commenced in the year 1985 in a temporary campus and the present campus was inaugurated in 1991 by the former Indian President, Hon'ble Shri.R.Venkatraman in the presence of then Governor of Tamil Nadu, Shri.Bhisma Narain Singh.

Academic activities commenced in the year 1985. The institution is affiliated to Anna University, Chennai. The institution runs 11 UG programs and 9 PG programs. Ten departments are recognized as research centers by Anna University. Eight programs are continuously accredited by NBA since 1998. Two cycles of NAAC accreditation have been completed.

The institution obtained autonomous status during the academic year 2016-17.

Vision

To be a leader in Higher Technical Education and Research by providing state-of-the-art facilities to transform the learners into global contributors and achievers.

Mission

To develop SVCE as a "CENTRE OF EXCELLENCE" offering Engineering Education to men and women at undergraduate and postgraduate degree levels.

To bring out their total personality, emphasizing ethical values.

To prepare them to meet the growing challenges of the industry and diverse societal needs of our nation.

Quality Policy

To impart quality education in Science, Engineering and Technology, nurturing right attitudes towards scholarship, research and entrepreneurship, enabling students to meet the challenges of industry, including Standards of Training, Certification and Watch keeping (STCW) requirements, society and environment.

Achieved by

1. Providing excellent infrastructure and conducive learning environment.

2. Building a harmonious working culture and motivating every member to bring out the best in them.

3. Inculcating ethical values, environmental awareness and developing professional competence and soft skills in every student.

4. Encouraging faculty and students to engage in research activities.

5. Committing to comply with relevant statutory requirements and continuously improving effectiveness of Quality Management System.

6. Associating with leading industries and institutions.

7. Responding promptly to changes in Technology.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Transparency in Governance and Administration
- Qualified and Experienced faculty members
- Good quality of students.
- Good infrastructure with modern laboratories.
- Scholarship for Meritorious students.
- Consistent and good placement record.
- Recognition by many Universities abroad for higher studies.
- Industrial training for Teaching and Supporting Staff in the relevant field.
- Faculty with rich industry experience.
- Interdisciplinary interaction among departments.
- Encouraging students to take up entrepreneurship.
- Communication and Soft Skill training programme for students to prepare them for placements / workplace.
- MoU with industries to help students in availing internship, training and placement.
- Many departments recognized as Research centers.

- Incentives to receive funded projects from government agencies.
- Financial Assistance to Faculty to attend conferences abroad.
- Encouragement and Support to organize Workshops /Conferences.
- Good laboratory facilities and research environment leading to consultancy and research projects.
- Conducive learning ambience atmosphere
- Training at Cochin Shipyard for Marine Engineering Students.
- Academic Autonomy

Institutional Weakness

- Inadequate Quarters for providing residential accommodation.
- Limited Hostel accommodation.
- Water logging in the campus due to non-absorption of water by the clayey soil.
- Inadequate technology transfers.
- No guest house available to accommodate visitors / guests.
- Lack of availability of electronic data.
- Limited International collaboration.
- Less MoU's with educational institutions abroad.
- Few IPRs.
- Lack of publicity and Outreach measures.

Institutional Opportunity

- Reputation and Goodwill in the society.
- Internship opportunities with neighboring industries
- Publicity through Social Media access
- Creating Centers of Excellence with neighboring industries.
- Tie-up with MSMEs in the industrial belt around the college.
- Technical training to industrial personnel by faculty members.
- Entrepreneurship training to students with novel ideas.
- Development of IT based apps for different applications.
- Start-up India and Make-in India initiatives.
- Scope to strengthen Curriculum through Industry tie-ups
- Scope to achieve international standards through OBE
- Good Alumni network.

Institutional Challenge

- Competition in placement.
- Lack of interest shown by MSMEs to collaborate.
- Declining interest in the society to pursue Engineering programs.
- Growing number of engineering institutions.
- Government policies towards funding for research projects.
- Industrial preference of science Graduates rather than engineering Graduates.
- Proliferation of electronic gadgets leading to diversion among learners.

- Increasing student behavioral issues and attitude towards learning.
- Imparting employability skills based on fast changing technology.
- Requirement by industries for multi-skilled professionals with managerial capabilities.
- Good Training and Placement Facilities in other institutions

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Sri Venkateswara College of Engineering (SVCE), an Autonomous Institution (affiliated to Anna University, Chennai) since 2016, offers Eleven Undergraduate, Nine Postgraduate and Ten Doctoral programs in various disciplines, and follows Outcome Based Education (OBE) to meet the local, national, and global requirements. The curriculum is in line with the Vision, Mission and Quality Policies framed by the stakeholders of the institution, and adheres to the guidelines prescribed by UGC, AICTE and Anna University. The curricula and syllabus are recommended by the Boards of Study and subsequently approved by the Academic Council. The bodies comprise of members from Academia, Industry and Alumni.

The college implemented Choice Based Credit System (CBCS) for all the programs from the AY 2018-19 and provides academic flexibility to the students. The Program Outcomes (POs) and Program Specific Outcomes (PSOs) are framed for each program based on benchmarks of the graduate attributes. The curriculum provides comprehensive knowledge in Science, Technology, Engineering and Mathematics, through courses in Humanities and Social Science, Basic and Engineering Science, Professional Core, and Professional Elective.

Open Electives from allied technical and emerging areas, project work, and internship are offered to help foster professional competency and soft skills in students. Program specific value added courses are offered to enhance the technical and soft skills of the students, and make them industry ready. Institution also offers courses focusing on nurturing ethical values, environmental awareness, entrepreneurship and managerial skills in every student. Challenges and opportunities in the industries are introduced to the students through industry supported courses and internship for students. Suitable skills are imparted through value added course and industrial project for finding solutions. Institution regularly invites industry experts to handle management courses as special electives.

SVCE provides conducive learning environment for the students, as well as harmonious working culture for the faculty members. To augment this, SVCE follows a systematic approach in collecting feedbacks on various aspects of curriculum from faculty, students, employers and alumni. Based on the feedback, curriculum and syllabi are revised and new courses are introduced to address the socio-economic changes of our nation, and the society at-large.

Teaching-learning and Evaluation

The Institution has a very good public perspective since its inception, and this is reflected in the number of admissions it attracts. The students are admitted through a single window counseling system conducted by the Tamil Nadu Government and the seats under various reservation category are filled as per the Government norms.

The Institution has a faculty strength of around 290 in with a Teacher Student ratio of 1:12.5. Around 47% of

the faculty members hold doctoral degree and the average teaching experience of the faculty members is around 10.5 years. On an average for every 19 students one faculty member is assigned as a mentor to monitor the academic performance, and other issues and counsel them whenever they are in need. For every class a class committee chairperson is assigned to record the academic feedback from the students thrice in a semester and provide necessary solutions. Students feedback on faculty is obtained twice in a semester.

The academic process is designed to cater to the student diversity. Slow and advanced learners are identified based on their performance in the continuous assessment and end semester exams. Students whose grade point average is less than the class average are properly guided and supported with remedial class, to make them to earn good grade and get placed. Advanced learners are encouraged to attain excellence through special electives taught by Industry experts, take part in Internships, Hackathons, earn credits through online portals such as NPTEL, Coursera, etc. For effective teaching, majority of the faculty members have adopted ICT enabled tools. Student centric methods, such as Experiential Learning, Project Based and Participative Learning are emphasized to augment classroom teaching.

Academic Calendar is planned prior to the commencement of the semester and circulated to the students. The conduct of the examinations is managed by the office of the Controller of Examinations. Campus Management Software (CMS) has been implemented to support exam schedule, room allotment, online payment of fees, Mark entry, declaration of results, finding the attainment of CO, PO and PSO.

Research, Innovations and Extension

The institution has created a vibrant ecosystem for Research and Innovation through a well-defined research policy. An amount of Rs. 4.03 Crores has been spent for the upgradation of research facilities in the past 5 years. Ten departments have been recognized as research centers by Anna University and 65 faculty members are recognized supervisors of the university. They are guiding 26 Full time and 185 Part time Ph.D. scholars. Centers of Excellence in thrust areas have been established to provide a conducive eco system for research.

To promote research, the institution has launched various schemes such as seed money for in-house research, intramural grants for students, special research incentive and performance-based incentives for faculty members. A steady growth in the research outcomes is evident in terms of filing patents, publishing papers in reputed journals and also fetching funded projects from various external agencies. The Institution has received 44 Research Projects worth Rs. 4.1 crore from external agencies like SERB, DST, DAE, AICTE, ISRO, IEI, etc. A total of 58 patents have been filed out of which 40 are published and 14 are granted.

SVCE is a pioneer in educating students through extension activities, thereby sensitising them to social challenges and nurturing their holistic personality. The institution encourages students to participate actively in NCC, NSS, YRC, RRC, and Rotaract club activities. In the last five years, 131 extension activities were conducted and an average 65% of students participated. The Institution has 60 functional MoU's which strengthens the industry institute collaboration and thus supporting the students for internships and industrial projects.

Institution Innovation Council (IIC) has been constituted as per the guidance of the Ministry of Education's Innovation Cell. IIC has earned Five Stars (Maximum Star Rating) and it is among the top five performers of Southern zone during the academic year 2019-2020. SVCE has been placed in the band "Excellent" in the ARIIA Ranking 2021 under the category of self-financing engineering colleges. The Institution has been selected as a Mentor Institution with a funding of Rs.2.0 Lakhs, from among top 50 Institutions across the

country in the year 2021.

Infrastructure and Learning Resources

The Institution encompasses technology-enabled classrooms, laboratories with state-of-the-art equipment, workshops with modern tools, drawing halls, seminar halls, dedicated faculty cabins and air-conditioned conference halls. Classrooms are equipped with LCD Projectors and inbuilt speakers.

The campus has Information Management System (IMS) department to manage the IT Infrastructure of the College with the support of Campus Management Software (CMS). The Institution has two leased internet lines with a capacity 500 and 30 Mbps. G-Suite Enterprise for Education license and campus-wide MATLAB license are also available. The entire campus is Wi-Fi enabled and is under CCTV surveillance.

The Institution has a fully air-conditioned, central library built over 4,900.75sq.m, with a reading room of seating capacity 300. It has a total number of 1,04,896 books (27,174 titles), 2,046 e-Books, 1,527 Journals and 10,253 back volumes of journals. The College has spacious hostels, medical centre, cafeteria, indoor and outdoor sports, and transport facilities.

The institution allots necessary budget for the development of infrastructure like buildings, teaching and learning resources, sports and other required facilities based on the requirements.

The Institution adopts policies and strategies for adequate technology deployment and maintenance and have installed best-in-class IT infrastructure and applications for academic and research activities. The campus is networked with a well-structured LAN with high bandwidth internet connectivity, 24x7 Wi-Fi facility and CCTV video surveillance systems. This serves academic and administrative needs.

The institution is a centre for National Cyber Safety and Security Standards (NCSSS). Fortigate-300D firewall has been deployed for providing a secured campus network in order to handle network data and traffic.

All academic and administrative activities are managed with a versatile Campus Management System (CMS). G-Suite Enterprise for Education license was procured for facilitating on-line events including teaching learning process since 2020. The institute has well-equipped Media center, recording facility, lecture recording system and editing software needed for e-content development, storage, and retrieval. Well- established systems and procedures are followed for maintaining and utilizing physical, academic and support facilities such as laboratories, library, sports complex, and classrooms.

Student Support and Progression

The holistic development of the students is the prime objective of the institution and has been a student-centric. Efforts are made to provide facilities to students for their betterment and improving their performance in academic and allied fields. During their period of study, students are entitled to avail a number of support systems and services for financial, academic and career guidance, co-curricular and extracurricular activities.

The college encourages its meritorious students and economically weaker section by awarding the scholarships and also supporting the students in receiving scholarship from government and non-government agencies. Interested students are provided laptops with subsidy based on merit-cum-means.

The Capacity and Skill development Cell caters to the welfare of students by supporting them in preparing for competitive examinations like GATE, UPSC, etc. The college has a well established training and placement cell for the students to get job offers from reputed companies.

Other support services like Grievance Redressal Cell, Internal complaints committee and Anti-Ragging committee address issues pertaining to students' problems. Girl students can address their grievances also through the Women Empowerment Cell. Students in need of medical emergency and counseling have access to medical centre with dedicated doctor and professional counselor inside the campus.

The college encourages extra-curricular activities and support the students in participating various state/national/International events. Physical Education department with the gymnasium, impressive courts and tracks provides avenues for sports and games and students participate in many competitions and win prizes. The college has cultural societies and Music Club serves as a boon for music lovers and for those who aspire to involve in music. Students actively participate in various activities organized through NCC, NSS, and Youth Red Cross and won prizes to bring laurels to the institution.

The active student council serves as a bridge between the students and college management. It involves in various academic and administrative committees.

The registered Alumni Association contributes significantly towards the development of institution through financial and other support services such as providing scholarship for needy students, providing awards, supporting for internships, projects and placement and supporting the infrastructure development.

Governance, Leadership and Management

Sri Venkateswara College of Engineering highly encourages the practice of decentralized and participative management and its sustenance at all levels of the organization. The vision and mission statements and governance description along with the narration of the perspective plans and teachers' participation in the decision-making bodies is reflective of an effective leadership in the governance of the institution.

The successful implementation of inter-disciplinary Nano Research Centre is an indication that institutional strategic plan is effectively deployed. A perusal of the description of organogram, service rules, recruitment, promotion and grievance redressal mechanism make it pellucid that the functioning of the institutional bodies is effective and efficient.

The deployment of ERP system is indicative of the effective implementation of e-governance in administration, finance and accounts, student admission and support and examination areas of operation. The health care scheme through SVCE Employees' Medical Benevolent Fund and other benefits such as festival advance, group tour expense, avenues for career development and recognition through awards, incentives is reflected that the institution has effective welfare measures for teaching and non-teaching staff and is indicative of a highly motivating milieu of the institution.

The financial support for higher studies, knowledge upgradation, membership in professional societies and to organize professional development programs shows the immense measures by the management in attracting and retaining faculty. A well-established process has been adopted for planning and allocating financial resources. The systematic and regular internal and external audits regulate the whole financial aspects. The institution always aims at continuous quality improvement and achievement in academic excellence through the

Internal Quality Assurance Cell (IQAC).

The institute also aims at constantly improving the quality of its various educational programs through the continuous monitoring of academic processes, feedback system and the other follow up activities such as participation in NIRF, ISO certification and collaborative quality initiatives with other institution. The institution regularly conducts internal and external academic audits. With the support of IQAC, participatory approach is made effective on a regular basis to monitor and ensure the quality of academic and administrative processes.

Institutional Values and Best Practices

Sri Venkateswara College of Engineering continually adopts various welfare measures to promote gender equity. Management ensures that the employees are given fair rewards, opportunities, and resources, including equal pay and benefits for comparable roles with similar responsibilities irrespective of gender.

The college has facilities such as a solar power plant, biogas plant, sensor-based energy conservation, and other power-efficient equipment for reaping alternate energy sources. Additionally, the green and environmental policies mandate reduces, reuse, and waste recycling inside the college premises. The college has state-of-the-art water conservation facilities such as rainwater harvesting pond, construction of tanks/bunds, and wastewater recycling facilities.

The management strives to promote eco-friendly campus initiatives by imposing a total ban on single use plastics, encouraging the usage of bicycles and battery-operated vehicles, landscaping with trees & plants, etc. Environment audits are regularly conducted to measure the outcome of such initiatives.

The college is disabled-friendly, barrier-free with ramps, customized washrooms, signposts, etc. The institution aims at bringing tolerance and harmony among the students and staff by celebrating many National and International days like Teachers' Day, Women's Day, Environmental Day, etc., towards providing an inclusive environment.

The institution conducts various programs to sensitize students and employees about their constitutional obligations on values, rights, duties, and responsibilities as citizens. The college takes pride in commemorating the international and national days that mark the important aspect of historical events to instill a sense of patriotism and promote nationalism among the staff and student community.

The institution believes in sustainable living and continually practices many best measures to enable the same. College promotes research and innovation by providing the necessary infrastructure to nurture a researchoriented mind among the faculty members, scholars, and students to keep pace with the advances in technology.

The institution has a strong alumni association which ensures mutual benefit and provides necessary support services to the future alumni of the college. Besides being Brand Ambassadors of the institution, they also offer professional networking to help students and college in academic, research, professional, and business activities in terms of financial and non-financial aspects.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	SRI VENKATESWARA COLLEGE OF ENGINEERING
Address	Post Bag No.1, Pennalur Village Chennai - Bengaluru Highway, Sriperumbudur (Tk)
City	KANCHEEPURAM
State	Tamil Nadu
Pin	602117
Website	www.svce.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Ganesh Vaidyanathan S	044-27152222	9445694664	044-2715211 1	principal@svce.ac. in
IQAC / CIQA coordinator	Gopinath S	044-27152000	9445115107	044-2715211 1	iqac@svce.ac.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

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

Establishment Details	
Date of Establishment, Prior to the Grant of 'Autonomy'	08-04-1985
Date of grant of 'Autonomy' to the College by UGC	27-05-2016

University to which the college is affiliated				
State	University name	Document		
Tamil Nadu	Anna University	View Document		

Details of UGC recognition			
Under Section Date View Document			
2f of UGC	16-03-2007	View Document	
12B of UGC	18-08-2011	View Document	

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)					
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks	
AICTE	View Document	25-06-2021	12		
AICTE	View Document	25-06-2021	12		
AICTE	View Document	25-06-2021	12		
AICTE	View Document	25-06-2021	12		
AICTE	View Document	25-06-2021	12		
AICTE	View Document	25-06-2021	12		
AICTE	View Document	25-06-2021	12		

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

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	Post Bag No.1, Pennalur Village Chennai - Bengaluru Highway, Sriperumbudur (Tk)	Rural	92.67	79908	

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,Automob ile Engineering	48	Higher Secondary	English	30	16
UG	BTech,Biote chnology	48	Higher Secondary	English	60	43
UG	BTech,Chem ical Engineering	48	Higher Secondary	English	90	68
UG	BE,Civil Engineering	48	Higher Secondary	English	30	14
UG	BE,Compute r Science And Engineering	48	Higher Secondary	English	180	180
UG	BTech,Comp uter Science And Engineering	48	Higher Secondary	English	60	55
UG	BE,Electroni cs And Com munication Engineering	48	Higher Secondary	English	180	162
UG	BE,Electrical And Electronics Engineering	48	Higher Secondary	English	120	80
UG	BTech,Infor mation Technology	48	Higher Secondary	English	120	119
UG	BE,Marine Engineering	48	Higher Secondary	English	30	17
UG	BE,Mechani cal Engineering	48	Higher Secondary	English	120	79
PG	Mtech,Biote	24	BE BTech	English	18	5

	chnology					
PG	Mtech,Chem ical Engineering	24	BE BTech	English	9	3
PG	ME,Comput er Science And Engineering	24	BE BTech	English	12	0
PG	ME,Electron ics And Com munication Engineering	24	BE BTech	English	12	2
PG	ME,Electrica l And Electronics Engineering	24	BE BTech	English	12	1
PG	ME,Informat ion Technology	24	BE BTech	English	18	0
PG	Mtech,Infor mation Technology	24	BE BTech	English	18	7
PG	ME,Mechani cal Engineering	24	BE BTech	English	18	3
PG	ME,Mechani cal Engineering	24	BE BTech	English	12	2
Doctoral (Ph.D)	PhD or DPhi l,Biotechnol ogy	72	ME MTech	English	8	1
Doctoral (Ph.D)	PhD or DPhi l,Chemical Engineering	72	ME MTech	English	25	1
Doctoral (Ph.D)	PhD or DPhi l,Computer Science And Engineering	72	ME MTech	English	49	10
Doctoral (Ph.D)	PhD or DPhi l,Electronics	72	ME MTech	English	62	6

	And Commu nication Engineering					
Doctoral (Ph.D)	PhD or DPhi l,Electrical And Electronics Engineering	72	ME MTech	English	67	8
Doctoral (Ph.D)	PhD or DPhi l,Information Technology	72	ME MTech	English	27	9
Doctoral (Ph.D)	PhD or DPhi l,Mechanical Engineering	72	ME MTech	English	91	11

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor			Assoc	Associate Professor			Assis	stant Pr	ofessor	
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		-		33	K			44				192
Recruited	26	7	0	33	30	14	0	44	120	72	0	192
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit		1	1	0				0				0

	Non-Teaching Staff									
	Male	Female	Others	Total						
Sanctioned by the UGC /University State Government				122						
Recruited	105	17	0	122						
Yet to Recruit				0						
Sanctioned by the Management/Society or Other Authorized Bodies				0						
Recruited	0	0	0	0						
Yet to Recruit				0						

	Technical Staff								
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government				69					
Recruited	64	5	0	69					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				0					
Recruited	0	0	0	0					
Yet to Recruit				0					

Qualification Details of the Teaching Staff

	Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	24	7	0	29	12	0	37	15	0	124	
M.Phil.	0	0	0	0	0	0	2	3	0	5	
PG	2	0	0	1	2	0	81	54	0	140	
UG	0	0	0	0	0	0	0	0	0	0	

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

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

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty	Male	Female	Others	Total
engaged with the college?	5	1	0	6

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	540	7	0	0	547
	Female	287	5	1	0	293
	Others	0	0	0	0	0
PG	Male	19	0	0	0	19
	Female	4	0	0	0	4
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	75	78	63	56
	Female	27	23	26	28
	Others	0	0	0	0
ST	Male	2	1	2	2
	Female	1	1	2	0
	Others	0	0	0	0
OBC	Male	570	475	450	499
	Female	153	202	156	147
	Others	0	0	0	0
General	Male	199	187	105	124
	Female	60	64	54	54
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		1087	1031	858	910

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

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Automobile Engineering	View Document
Biotechnology	View Document
Chemical Engineering	View Document
Civil Engineering	View Document
Computer Science And Engineering	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Information Technology	View Document
Marine Engineering	View Document
Mechanical Engineering	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Many interdisciplinary Courses have been introduced to suit the level of students from other disciplines who are eager to have a taste of other disciplines. This is done by creating a group of electives known as Open electives. Value added courses that cover the aspects that are not in the curriculum prescribed by the disciplines but add value by way of seeding the concepts of entrepreneurship, Design thinking etc., to make them better professionals are provided for, as prescribed in the Model curriculum and NEP. In addition, many multi-disciplinary courses that hone the managerial skills such as Financial Statement analysis, Corporate Finance etc., related to handling of finance, training in language and soft to make the students good in professional communication and inter-personal relationships, are offered.
2. Academic bank of credits (ABC):	As a prelude to the implementation of the Academic Bank of Credits prescribed in the NEP, the college has formulated a well defined credit system in which the following features are either incorporated already or being planned to be included from the Regulations 2022. • Exchange of credits for courses and internships done in collaboration with foreign universities • Credits earned through online courses such from SWAYAM is already being considered for award of the degree. • Special elective courses

	handled by external experts are also considered for credit requirements • Redesigning of the curriculum is being planned to suit the Multiple Entry- Multiple Exit scheme, so that suitable certification, diploma, graduate degree, post-graduate degree and doctorate can be awarded at the appropriate time based on an extension of a same course of study.
3. Skill development:	As viewed by the NEP, the development of entrepreneurial skills is very important to the students studying in the Technical HEIs so as to contribute to the economy of our country. Towards achieving this, the institution started an Entrepreneurship Development center recognized by the MSME, GoI, which was later upgraded to the status of an Entrepreneurship promotion and Incubation Center (EPIC) since 2015, with due recognition by Central and State bodies such as EDI, Ahmedabad and EDII, Tamil N?du. EPIC has been carrying out motivational activities by joining hands with the IIC to develop many entrepreneurs by making the students explore their hidden innovative potential. Many innovative ideas have been identified and have been nurtured as a part of incubation facility available in the institution.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	The integration of Indian Knowledge system with emphasis on teaching Indian Languages, culture etc. is ensured through the activities of the cultural and language clubs. A book on the contributions of Tamil Language to the Technical literature has been brought out by one of the faculty members which is likely to motivate the readers by bringing out the competency of Indian languages which is on par or even more than popular international languages like Japanese that have been successfully deployed in the technical literature.
5. Focus on Outcome based education (OBE):	The focus on an Outcome Based Education is the primary aim of the NEP which makes the standard of education in our country defined on par with any other advanced nation. Towards this end, the institution has been practicing the measurement of various outcomes such as the Course Outcomes at the course level, Program outcomes and Program Specific Outcomes at the end of the program through a systematic mapping of the COs to the POs and PSOs. The measure of OBE is also facilitated through the OBE module of the Campus management

	Software which makes the process semi-automatic, reducing the manual workload involved in calculating the attainments. Targets set and attained pertaining to the COs are analyzed at the end of every semester. Gaps are addressed if there is a deficiency and standards are incrementally increased if the attainments exceed the target.
6. Distance education/online education:	The nature of administration of some of courses like special electives is made flexible through the deployment of online methodology so as give the benefit of engaging students across all disciplines as well as to derive the expertise of external experts who may be in any part of the world. Also, the modality of distance education is being explored with possible creation of study centers across various geographical locations which however requires the approvals from the affiliating University. The institution is also looking at offering customized programs for industry personnel who will be attending classes beyond their working hours and during weekends.

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

File Description Institutional data in prescribed format			Document View Document			
21	20	20			20 20	
2020-21	2019-20	2018-19		2017-18	2016-17	

1.2

Number of departments offering academic programmes

Response: 10

2 Students

2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19		2017-18	2016-17
3656	3871	4153		4252	4359
File Description			Document		
Institutional data in prescribed format		View Document			

2.2

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

2020-21	2019-20	2018-19		2017-18	2016-17
1053	1101	1084		1075	1147
File Description			Document		
Institutional data in prescribed format			View Document		

2.3

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2020-21	2019-20	2018-19		2017-18	2016-17
3652	3850	4106		4207	4314
File Description			Document		
Institutional data in prescribed format			View]	Document	

2.4

Number of revaluation applications year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
199	544	820	650	414

3 Teachers

3.1

Number of courses in all programs year-wise during last five years

2020-21	2019-20	2018-19		2017-18		2016-17	
1203	913	972		941		992	
File Description			Document				
Institutional data in prescribed format		View	Document				

3.2

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

2020-21	2019-20	2018-19		2017-18	2016-17	
293	241	243		309	309	
File Description			Document			
Institutional data in prescribed format		View Document				

Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19		2017-18	2016-17
310	241	243		309	307
File Description			Document		
Institutional data in prescribed format			View]	<u>Document</u>	

4 Institution

4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2020-21	2019-20	2018-19		2017-18	2016-17
913	859	1032		1093	1198
File Description			Document		
Institutional data in prescribed format			View	<u>Document</u>	

4.2

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

2020-21	2019-20	2018-19		2017-18	2016-17
490	517	449		448	418
File Description			Docum	nent	
Institutional data i	n prescribed format		View	Document	

4.3

Total number of classrooms and seminar halls

Response: 100

4.4

Total number of computers in the campus for academic purpose

Response: 1574

4.5

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

2020-21	2019-20	2018-19	2017-18	2016-17
1650.78	2353.57	2342.62	2296.01	1923.26



4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

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

Response:

Curriculum Development in accordance with Statutory Bodies

The curriculum offered by the institution follow an Outcome-Based Education which are relevant to local, national, regional, and global developmental needs. The programs are designed to achieve the twelve Program Outcomes (POs), two or three Program Specific Outcomes (PSOs) and three to five Course Outcomes (COs). Theyare framed strictly based on the guidelines and model curriculum prescribed by AICTE and Anna University, Chennai.

Curriculum Design and Structure of the Program

The feedback from the stakeholders including faculty, students, alumni, and industrial experts is taken into account while developing the curriculum and the syllabus. The curricula and syllabi are recommended by the seven Boards of Study and subsequently approved by the Academic Council.

The curriculum includes Foundation Courses, Professional Core Courses, Professional Electives, Open Electives, Employability Enhancement Courses, Online Courses, Value Added Courses, Special Electives, and Project Work. It provides a strong theoretical foundation combined with practical engineering expertise with an emphasis on Professional, Social and Ethical Responsibility as well as addresses global issues related to Environmentand Sustainability.

Learner Centric Curriculum

All the programs offered by the institution follow Choice Based Credit System from 2018-19. It gives students the flexibility to choose interdisciplinary and skill-based courses. Twenty five percentage of the projects have been carried out in industries to expose the students to latest technologies. Industrial Internship is is a part of the curricula which exposes them to real time practices and problems faced by industries and come up with solutions. Thus the curriculum enhances the employability of students and makes them industry ready. Industrial visits are arranged for students at least twice a year in order to expose them to industrial practices.

Curriculum meets local, national, regional, and global development needs

The curriculum provides an in-depth knowledge in science, engineering and managerial skills. The project components enable the students to fulfil the societal requirements. Approximately 31% of projects carried out in the last five years have addressed societal needs.

The institution offers several new courses to promote interdisciplinary activities to address the national and global developmental needs in the domains of Internet of Things, Data Science, Data Analytics, Artificial Intelligence and Machine Learning, Digital Manufacturing, Industry 4.0 and Electric Vehicles. Further, the courses related to Renewable Energy, Smart Cities, Waste Management, Water Treatment and Climate Change are offered to sensitize global issues.

In addition to employability, the courses are aimed at enhancing entrepreneurial skills of the students towards the national mission "Make in India" resulting in the economic growth of the country.

Modern medicine and healthcare rely on engineering and technology to deliver improved diagnosis and treatment. The curriculum includes courses on Tissue Engineering and Stem Cell, Molecular Therapeutics, Gene Therapy and Biomedical Engineering that culminates engineering and medicine. To cite a few examples, our students have won awards at the International Genetically Engineered Machine (iGEM) competition held at MIT, Boston, USA. Our alumni serve as scientists in reputed institutions like Mayo Clinic, USA contributing solutions for health issues.

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

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 100

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Response: 21

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 21

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Any additional information	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 60.21

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development yearwise during the last five years..

2020-21	2019-20	2018-19		2017-18	2016-17
750	540	530		560	650
File Descriptio	n		Docun	nent	
Programme / C	urriculum/ Syllabus o	f the courses	View I	Document	
MoU's with relevant organizations for these courses, if any		View I	<u>Document</u>)	
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses			<u>View I</u>	<u>Document</u>	
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)		View I	Document		
Any additional	information		View I	Document	

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 18.31

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

Response: 478

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 2611

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course

system has been implemented (Data for the latest completed academic year).

Response: 90.48

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

Response: 19

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

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

Response:

As an autonomous institution, Sri Venkateswara College of Engineering offers a number of courses related to important cross cutting issues such as gender equality, environment and sustainability, in addition to proficiency in Science, Technology, Engineering and Mathematics (STEM) education. The program curriculum ensures that at least 20% of the courses are related to humanities, social and basic sciences and management.

Gender

Elective Courses are offered to educate students in social justice, human rights, diversity, and women empowerment. A topic on Women and Child welfare has been incorporated in the mandatory course, Environmental Science and Engineering (GE18251), offered to all students. An open elective course, Gender Sensitization and Social Impact (OH18001) is offered to expose and educate the students on a spectrum of issues such as gender based experience and perception, opportunities on socioeconomic development and gender differences in Geo-political scenarios.

Exclusive workshops and awareness programs on Women Empowerment and Entrepreneurship like DST sponsored "Women Entrepreneurship Development Program" are organized periodically, through institution's Entrepreneurship Promotion and Incubation Center (EPIC), providing training in Science and Technology for women entrepreneurs in diversified engineering domains.

Human Values and Professional Ethics

The institution offers a mandatory course, Indian Constitution and Society (MC18001), to all undergraduate students, to instill morality, social values, honesty, dignity of life and social responsibilities. The programs offer at least one elective course on Professional Ethics and Human Values such as Human

Relations, Values and Ethics (AE18603) and Professional Ethics (GE18054).

Unique domain specific courses are offered such as, IPR and Ethical Issues in Biotechnology (BT18011), and Cyber Security and Ethical Hacking (OE18503). Ethics and Values are emphasized from the first year through two or three sessions conducted during the Student Induction Program by inviting eminent experts from organizations such as Gandhi Peace Foundation.

Additionally, experts from industries and academia like Rajiv Gandhi National Institute of Youth Development (RGNIYD) are invited regularly, who share information on gender, human values and professional ethics practiced in their organization, and infuse character building and soft skill development in students.

Environment and Sustainability

All the programs offer courses related to green technology and environmental issues and enable students to work towards sustainability. Topics such as biodiversity, disaster management, consumerism and waste management are included in the mandatory course, Environmental Science and Engineering (GE18251).

In addition, program specific courses such as: Basics of Environmental Biotechnology (OE18203 / BY18009), Environmental Sustainability (CL18019), Hybrid and Electric Vehicles (AE18602), Automotive Pollution and Control(AE16603), Wind and Solar Energy Systems (EE18704), Renewable Sources of Energy (ME16003) are offered in various engineering disciplines.

A value added course titled Green Building Concepts (VD18405) is offered to promote sustainable infrastructure. Students are encouraged to carry out projects related to green audit, renewable energy and conservation, organic farming and waste management, with the goal to reduce the carbon footprint. This has resulted in the institution being recognized as Wipro Earthian Campus and Hand Print Campus awarded by SAYEN (South Asian Youth Environmental Network and CEE (Centre for Environmental Education) supported by UNEP (United Nations Environment Programme)

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	<u>View Document</u>
Any additional information	View Document

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

Response: 80

1.3.2.1 How many new value-added courses are added within the last five years

2516111711File DescriptionDocumentList of value added courses (Data Template)DocumentView DocumentNote the set of value added courses (Data Template)View DocumentView Document	2020	0-21	2019-20	2018-19		2017-18	2016-17	
List of value added courses (Data Template) View Document Brochure or any other document relating to value View Document	25		16	11		17	11	
List of value added courses (Data Template) View Document Brochure or any other document relating to value View Document								
Brochure or any other document relating to value View Document	File Description							
	File D	escription			Docum	nent		
			courses (Data Temp	late)				

View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 65.78

Any additional information

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

2020-21	2019-20	2018-19	2017-18	2016-17	
2265	2628	3015	3047	2388	

File Description	Document
List of students enrolled	View Document
Any additional information	View Document

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 79.46

1.3.4.1 Number of students undertaking field projects / internships / student projects

Response: 2905

File Description	Document
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document
Any additional information	View Document

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

Response: A. All 4 of the above

File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document

1.4.2 The feedback system of the Institution comprises of the following :

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

File Description	Document	
Any additional information	View Document	
URL for stakeholder feedback report	View Document	

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

1.1 Numbe	r of students admi	tted year-wise durin	g last five years	
020-21	2019-20	2018-19	2017-18	2016-17
10	858	1031	1087	1198

2020-21	2019-20	2018-19	2017-18	2016-17
1266	1233	1233	1251	1251

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

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

Response: 67.15

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

2020-21	2019-20	2018-19	2017-18	2016-17
281 3	323	307	287	349

File Description	Document	
Institutional data in prescribed format	View Document	
Any additional information	View Document	
Link for Additional Information	View Document	

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:

Identification of learning levels of the students

The Student community of SVCE is diverse and from different segments of the society. Hence the institution provides a conducive atmosphere to suit the heterogeneous academic profile of the students.

Student Induction Program (SIP) is organized to the first-year students in which a diagnostic test is conducted to assess their academic profiles, and a bridge course is conducted in subjects like Basic Sciences and English Language where the fundamentals are strengthened for the students with less academic proficiency. Furthermore, students are evaluated through a post-program assessment to understand the effectiveness of the SIP.

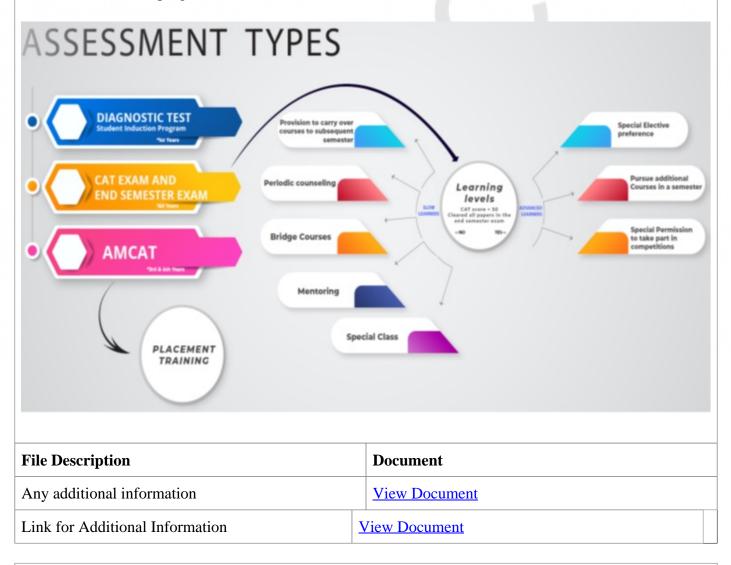
Every semester, the learning level of the students is assessed through three Continuous Assessment Tests (CAT) followed by end semester examination. Students securing less than 50% of the total marks in the CAT or whose grade point average (GPA) is lesser than the class average are identified for special attention.

Special Programmes for Slow Learners:

- 1. On an average around five remedial classes are conducted beyond the college hours per course per semester.
- 2. One tutorial class per course per week is incorporated in the time table to enhance the problemsolving skills and additional resources are provided.
- 3.Students' overall performance is discussed with their parents during the Parents-Teachers Meet which is conducted every semester.
- 4. A five day bridge course is conducted for the lateral entry students to enhance their analytical and communication skills.
- 5. The Institution encourages peer mentoring system, wherein the needy students are partnered with peers to enhance their learning abilities.
- 6. Special training sessions organized by the departments and Training and Placement Cell of the college have resulted in an average of two percentage of slow learners getting placement offers in the last five years.
- 7. To facilitate the slow learners to learn at their own pace, a provision to drop a course and complete the same in subsequent semesters is made available in the regulation.

Special Programmes for Advanced Learners:

- 1. Advanced learners have the option of studying one or two courses in advance. Hence, at the end of prefinal semester itself they can complete all the theory courses and intern full-time in the final semester to make themselves industry ready engineers.
- 2. Preference is given to register for the special elective courses such as Financial statement analysis, Mathematics for AI & ML, Managerial Economics, Securities Market, etc. handled by external experts to enhance their managerial and technical skills.
- 3. Students are motivated to carry out research and are sponsored to participate in International and National Conference sand events such as, Smart India Hackathon, SAE-BAJA, iGEM.
- 4. Meritorious students from each class are recognized and rewarded annually with cash prize / awards and also with Institutional scholarships.
- 5. Special permission is given to the students to take part in workshops/ conferences or any career enhancement programs.



2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)

Response: 12.48

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

The curriculum is designed to expose the students to experiential learning, participative learning and problem-solving methodologies to ensure their holistic development and facilitate life-long learning. The teaching- learning process consists of course content delivery, tutorials, practical sessions, projects, seminars, internships, industrial visits, and so on. All the classrooms are equipped with the facilities like campuswide internet through a broadband connectivity of 530 Mbps, 169 number of wi-fi hotspots, 98 number of LCD projectors, to facilitate student centric learning. Dr. A.C. Muthiah Central Library has its own dedicated portal to access video lectures, books and journals.

Experiential learning

Experiential learning is imparted to the students in laboratory sessions, internships and through hands on trainings in workshops.

- 1. Students apply the theory in the well-equipped laboratory to understand and grasp the concepts clearly. Approximately 30% of the courses impart experiential learning.
- 2. Internship is mandatory and hence all the students work on real time projects.
- 3.All the departments arrange industrial visits where in the students are exposed to industrial environment. On an average around 60 visits are made every year.
- 4. Project work is mandatory for all the students in the final semester to carry out project either inhouse or in an industry which carries a maximum credit of 10.
- 5. Value added courses like Gear Design, Python programming, etc., also impart experiential learning.

Participative Learning:

Participative learning is encouraged through technical events, paper presentations, group discussions, quiz, etc,. It provides students with an opportunity to share, analyse and gain knowledge.

- 1. Faculty members motivate the student to take part in the paper presentation. On an average 20 percentage of the students per year present papers.
- 2. National level technical symposia are planned and organized by the third-year students of each department annually.
- 3. Institute is a registered local chapter of NPTEL. Good number of students and faculty members have completed the thrust area subjects in NPTEL, Coursera, etc.

Problem-solving methods:

Exposure to problem solving techniques is given to the students through tutorials, assignments and projects. Around 60% of the courses focus on this learning experience.

- 1. Activity based problems in the higher order thinking are given as a part of assessments.
- 2. Students research day is conducted annually to facilitate the students to showcase their projects which are evaluated by industry experts. More than 200 innovative ideas were exhibited.
- 3. Students participate in hackathons, and have even provided solutions for the problems stated by Government of India. Around 200 students per year actively participated in Hackathons and five teams won prizes with a cash award of around four lakhs.



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

Response:

The College adopts ICT enabled teaching methodologies through PPTs, video clippings, audio visuals and online resources to complement the traditional classroom education. Efforts are taken to provide an elearning atmosphere in the classroom and in laboratories.

- College premises is enabled with around 169 Wi-Fi access points with 530 Mbps to enhance the teaching learning process.
- In the classrooms, 98 number of LCD projectors with different types of connectivity is made available.
- All the Computer laboratories with high speed internet of 530 Mbps speed connection are available.
- Seminar halls and Conference rooms are equipped with LCD projectors, speakers and interactive boards, where guest lectures, expert talks and various competitions are regularly organized for students.
- The institution has subscribed to 325 licenses of G-Suite Enterprise Education version which includes Google Classroom.
- The institution has subscribed to 4300 licences to enable them to use the Learning Management System Module in the Campus Management Software (CMS), to impart course content to the students.
- Around 30 faculty members have their own YouTube channels and have posted nearly 130 video lectures in their channels for the benefit of our students. The average number of subscribers is 4500.
- To enhance the E-learning experience of the students, especially in the analytical courses, around 40% faculty members are using digital writing pads. The college has facilitated the purchase of the same across all departments.
- Faculty members also use other ICT tools such as Whiteboard, Jam Board, Google Forms, and MATLAB simulation tools for teaching and assessment.
- Faculty members use PPTs enabled with animations and simulations to improve the effectiveness of the teaching- learning process especially for core courses like Manufacturing Processes, Robotics, 3-D Printing, Automotive Engines etc.
- 3566 E-mail IDs and WhatsApp groups for every class are used as platforms to communicate and share materials, make announcementsand address queries.
- 20 percentage of faculty members across all departments have attended the Faculty Development Program on Virtual Lab organized by PALS and simulation-based experiments were conducted.
- A Digital library section has been established which houses e-resources such as
 - NPTEL course materials.
 - Video lectures developed by members of faculty of the college accessible through internet
 - e-journals
 - e-books
 - Access to the research journals is available online and through proxy server in the campus.
 - Each student can renew their books online and can search the availability of books through CMS

In addition to the above, The CMS facilitates recording of student attendance, assessment and assignment scores. Students can view their progress and other academic details using their login credentials.



File Description	Document
Any additional information	View Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	<u>View Document</u>

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

Response: 20:1

2.3.3.1 Number of mentors

Response: 185

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll	View Document
Circulars pertaining to assigning mentors to mentees	View Document
Any additional information	View Document
Link for additional information	View Document

2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution

Response:

Academic Calendar Planning

The academic calendar is prepared based on the number of days required to complete the academic activities. The Controller of Examination prepares the schedule for commencement of classes, conduct of internal assessment tests, internal mark entry, commencement of end semester practical and theory examinations, last working day for UG and PG programs and re-opening date for the next semester.

Simultaneously, at the department level, the subject options are floated to the faculty members to express their choice of handling the subjects in the forthcoming semester. Subject allocation is done and the timetable is prepared by the timetable coordinator and conveyed well in advance before the commencement of the semester to make the faculty member prepare the necessary lecture / course material. The timetable includes faculty members handling a subject, schedule of classes, names of class representatives, faculty advisors, class committee chairperson, venue etc. will be hosted on the college's website.

Lesson Plan

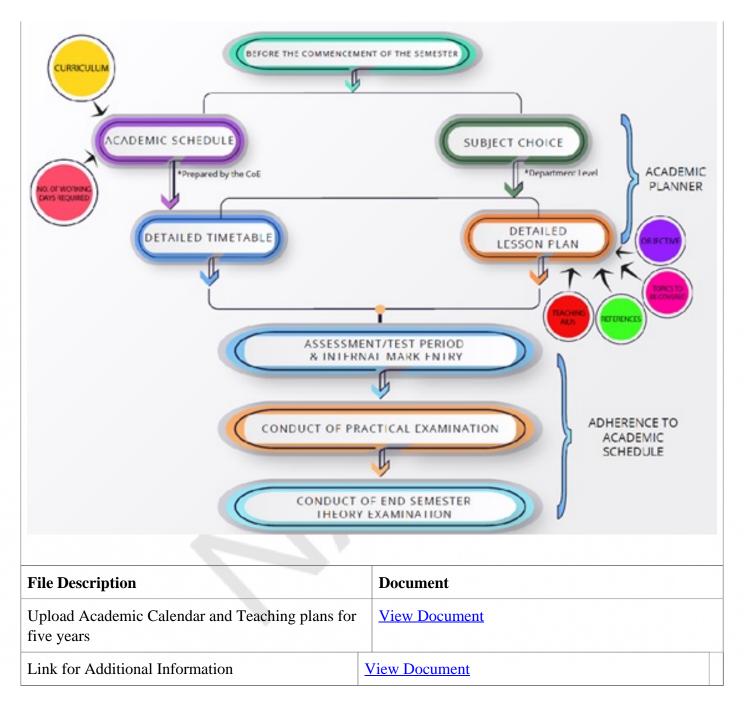
Before the commencement of classes, all the faculty members prepare a detailed lesson plan along with the mode of delivery of lecture and any reference material to be used. The completed lesson plan is posted on the respective department web page.

A typical laboratory schedule consists of allocating 15 sessions per semester covering three hours per week. A particular semester will have two or three lab courses. A Lab plan will be prepared for the lab courses which covers the list of experiments a batch of students will be doing in a session. For practical courses laboratory manuals are printed and distributed to the students. A model examination is scheduled at the end of the course in which the performance of the students along with the continuous assessment score is consolidated to arrive at the internal marks.

All Faculty members maintain an Attendance and Assessment Record (AAR) to make entries of student's attendance, scores of assignments and continuous assessment tests. Based on the performance of the students in every assessment test, special classes will be scheduled, and the faculty members can record the attendance of the slow learners in the AAR book. Further, the topics discussed during each class can be recorded to plan for the revision of the lesson plan in the next semester. Similarly, for practical courses a separate AAR is maintained in which the provisions are available for entering the observation, viva voce and record marks for each experiment. The advance release of the academic calendar and lesson plan ensures the progress of the activities as planned.

Adherence to Academic Calendar and Teaching Plan

All listed activities in academic schedule are executed as per the plan and occasionally a few scheduled activities may deviate from the plan due to unavoidable circumstances.



2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years				
Response: 99.03				
File Description Document				
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	View Document			
List of the faculty members authenticated by the Head of HEI	View Document			
Link for Additional Information View Document				

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

Response: 38.19

2.4.2.1 Number of full time teachers with *Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit.* year wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
139	97	96	103	94

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Link for Additional Information	View Document

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

Response: 10.51

2.4.3.1 Total experience of full-time teachers

Response: 3078

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response: 31.6

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

2020-21	2019-20	2018-19		2017-18	2016-17
41	26	32	32		30
File Description			Docum	ient	
Institutional data in prescribed format (Data Template)					
	data in prescribed forma	at (Data	View D	Document	

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 12.92

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
199	544	820	650	414

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Link for Additional Information	View Document

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

Response:

Preamble

All the examination related processes and procedures are automated using a Campus Management System (CMS) software, which include, course registration, exam scheduling, room allocation, mark entry, result processing and publishing, revaluation and review application. Generation of data for OBE calculation is integrated into the software and carried out digitally.

Unique feature of Examinations at SVCE

- 1. Question wise marks are stored in the software for the OBE Calculation
- 2. Activity based assessments, as part of the Continuous Assessments, are in vogue to assess the technical and soft skills of the students.
- 3. Continuous assessments and end semester examinations are given equal weightage for theory courses. For practical courses 75% of weightage is given for continuous assessments and the rest is for the end semester examinations.

4. Examination procedures

Performance in each course of study shall be evaluated based on

- 1. Continuous Assessment (CA).
- 2. End Semester Examination (ESE).

Each course, both theory and practical (including project work & viva voce examinations) is evaluated for a maximum of 100 markswith weightage of CA and ESE as shown below:

S. No	Category of course	CA	ESE
1.	Theory Courses	50 Marks	50 Marks
2	Laboratore Common	75 Marler	25 Marles
2.	Laboratory Courses	75 Marks	25 Marks
3.	Project Work	65 Marks	35 Marks
4.	All other EEC Courses	100 Marks	_

Processes integrating IT

Conduct of Examination

End semester examinations and Continuous assessment tests are conducted through pen and paper mode for three - hoursand 90 minutes respectively. Question papers are prepared by the internal members of faculty and the same are scrutinized by an expert committee consisting of at least one member from a reputed institution.

Uploading of Marks into the CMS software

An OMR sheet is attached with the papers used for ESE. They are corrected manually and the OMR sheets are scanned and the marks are uploaded into the software. The blind valuation system is followed for the ESE. Each faculty member is given a login credential to facilitate the entry of marks of CA tests and activity-based assignments.

Results Processing and publishing

Internal marks are calculated for all the students in their registered courses based on their marks in CA tests and activity-based assignments as per the scheme explained above. The same is verified by the faculty members and students through their login credentials. Then the total marks are calculated based on the weightage and a letter grade is allotted to all the courses registered by the students digitally. After the approval from the Result Passing Board the results are published through CMS. The students can view their result which consists of letter grades to each subject and current semester GPA. In the year 2018-19, Digital Valuation System (DVS) was implemented for the ESE papers of one of the departments. In DVS the written papers scanned by a high-speed scanners and a specific software was used to evaluate the answer scripts digitally. This method reduced the exam cycle time.

Continuous internal assessment system

For theory subjects:

Written test for 90 minutes is conducted for maximum of 50 marks, carrying 70% weightage. Activity based assessments, such as written assignment/tutorial/seminar/mini project/ quiz/ class room activities / MCQ, are conducted for a total of 50 marks with 30% weightage.

For Practical subjects:

Maximum of 50 marks is awarded for successful completion of all the prescribed exercises / experiments done in the Laboratory and a model test is conducted and the mark is scaled down to 25. The total mark, rounded to the nearest integer, is out of 75.

For Project works:

The project work of the students will be evaluated as per the following scheme.

Continuous Assessment		End SemesterExaminations			
(65 Marks)			(35 Marks)		
Review I	Review I Review II Review III		Thesis (15)	Viva-voce (20)	
Revi	ew committee		Examiners 1 & 2	Examiner 1	Examiner 2
15	25	25	15 10 10		
Outcome of IT integration in Framination systems					

Outcome of IT integration in Examination systems

- 1. Totaling and calculation errors are eliminated.
- 2. Reduction in the examination cycle time.
- 3. The students can view their answer scripts electronically.
- 4. Revaluation and review are digitized and thereby eliminating the need for photocopying of answer scripts.

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

2.6 Student Performance and Learning Outcomes

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

Response:

SVCE has adopted outcome-based education and all the programs have well-defined POs, PSOs and COs. The twelve POs define the graduate attributes, two to three PSOs define the domain specific skills acquired from the program and the three to five COs defined for each course describe the outcomes expected upon completion of each course.

The PSOs are formulated by a team of senior faculty members of the program and are approved by the stakeholders. Course outcomes are defined by a team of faculty member handling the course. The syllabus along with the course objectives and course outcomes is framed and the same is approved in the Board of studies comprising the members from leading academic institutions, alumni and industry experts. The assessments are designed to evaluate the course outcomes.

Dissemination of PO and PSO

- Published in the webpage of each department
 - The department webpages describe the vision, mission, program education objectives, program specific outcomes along with the 12 graduate attributes which are given as the outcome of the program.
- Displayed at strategic locations in the institution
 - The main corridors in the departments, laboratories, department office, etc,. in addition to common locations like library, hostels and in the cafeteria.
- During student induction program.
 - A session on outcome-based education is dedicated to disseminate the importance of POs and PSOs to the students.
- It is displayed in all the classrooms and laboratories.

Dissemination of CO

- Through the syllabus documents published in the Controller of Examinations website. The syllabus contains course objectives and course outcomes. Both students and faculty get to know the COs of various courses through the syllabus.
- Lesson Plan Annexure

The faculty knows the COs, POs and CO-PO mapping from the lesson plan annexure.

- COs are communicated to the students by the course faculty.
- In laboratories for the practical courses
- Faculty Induction Program newly inducted faculty members are exposed to the Outcome-Based Education (OBE) during the induction program. They are trained by the internal and external experts.
- Members of faculty are motivated by the management to participate in the Outcome based education program being organized by leading institutions with sponsorship.

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

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

Response:

The course outcomes (COs) are mapped to the appropriate program outcomes (POs) and program specific outcomes (PSOs). The performance of the students in the continuous assessment test, assignments and the end semester exam in each course is used to compute the level of attainment of the COs leading to the attainment of POs and PSOs.

Procedure for CO attainment

Total CO attainment = Direct attainment (90%) + Indirect attainment (10%)

Direct Attainment:

Direct Attainment = Continuous Internal Evaluation (45%) + End Semester Exam (45%)

90% of the total weightage is considered for direct attainment. The following components are considered

- Continuous assessment tests which are conducted based on COs
- Assessment activities like assignment / tutorial/ experiment/quiz/any other activity related to COs
- End semester examination.

Parameter CAT (70% of CIE)			Weightage	
			31.5	
Other Assessment (30	13.5			
CIE) MCQ		4.5		
Others		3.0		
	Application activity			
	Quiz			
	Technical writing			

(Note: Written Assignment & MCQ is mandatory. In addition, any one from the "others" can be considered for calculation)

A software is used for finding the attainment of course outcomes. The actual attainment against the target is recorded in the lesson plan annexure as shown below. The reasons for non-attainment of course outcomes are analysed and an action plan report is prepared by the course handling faculty.

Based on the report, changes in the teaching - learning process and mode of course content delivery are

proposed by the course handling faculty and these changes are taken into consideration whenever this course is being offered in the subsequent semesters.

СО	Target (%)	Achieved (%)	Gap (%)
	(A)	(B)	(A-B)
CO1			
CO2			
CO3			
etc			

BRIDGING THE GAP IN CO

СО	ACTION PLAN
CO1	
CO2	
etc	

Indirect Attainment:

10 % of the total attainment is considered for indirect attainment. In this attainment, the feedback of students on curriculum and syllabus is considered

Parameter	Weightage	Frequency
Student Feedback on curriculum	10.0	Collected at the end of every course
& Syllabus		

PO and PSO attainment:

The attainment of all the course outcomes is taken for calculating the PO and PSO attainment. Weighted averages are used to calculate the POs and PSOs.

PO attainment = Through COs (90%) + Through feedback 10% (at the end of the program)

Feedback factors and weightage:

Parameter	Weightage	Frequency
Employer feedback on PO/ PSO	5	Collected at the end of the program

Student feedback on Program Outcomes 5

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

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 97.34

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

Response: 1025

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

Response: 1053

File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document
Any additional information	View Document
Link for the annual report	View Document
Link for additional information	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process		
Response: 3.73		
File Description Document		
Upload database of all currently enrolled students <u>View Document</u>		

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

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

Response:

The Institution gives high priority for the promotion of quality research. The college ensures that adequate resources are made available in the campus for research in terms of space, equipment and support facilities. Sufficient budget is allotted to procure state-of-the-art equipment to update the facilities as and when needed to pursue research in thrust areas. An amount of about Rs.4.03 Crores was spent for the upgradation of research facilities during the past 5 years and the amount spent year wise is as follows:

Year	2020-21	2019-20	2018-19	2017-18	2016-17
INR in Lakhs	132.88	55.44	27.94	90.70	96.15

Some of the major research facilities augmented in the last five years are as follows:

1. Vertical Machining Centre, ACE Micromatic

2. Ultimaker S5 FDM 3D Printer

3. Mitsubishi Six-Axis Robot

4. TESA MH3D Dual Coordinate Measuring Machine

5. Robotic Wire Arc Additive Manufacturing setup

6. Laser Marking Machine

7. Rotary Evaporator

8. RO & DM plant facility and Ion Exchange facility

9. Computerized Hydraulic 20T Universal Testing Machine

10. Digital Rebound Hammer

11. HP Z2 G4 Tower Workstation

12. Automation Studio

13. MATLAB Software Campus-wide license

14.PCB Prototype Making Machine 800W

15. Micro Hardness Tester

16. Robotic Cold Metal Transfer Welding

To promote research on thrust areas the following Centers of Excellence are established.

• Interdisciplinary Centre for Nanotechnology for micro-level fabrication

• Centre of Excellence on Additive and Computer Integrated Manufacturing

• Centre of Excellence on Data Science

Interdisciplinary Centre for Nanotechnology has been set up at a cost of Rs.1.75 crore with the support of the Department of Science and Technology, GoI, under the FIST scheme.

The Welding Research Cell is jointly established by the Departments of Mechanical and Marine Engineering to carry out research and consultancy.

The Automotive Research Cell established by the Department of Automobile Engineering is equipped with advanced testing facilities like Chassis Dynamometer and AVL setup.

The Institution promotes Research and Development activities through a well-defined research policy. The institution encourages the active involvement of faculty, students, and research scholars to carry out research and recognizes their achievements. Ten departments are recognized as research centres by Anna University.

To promote research, the institution has launched various schemes such as:

- Seed money for in-house research.
- Funding for Undergraduate and Postgraduate students through Intramural Grants for projects.
- Special incentive for research culminating with the establishment of specialized centres
- Performance-based research Incentives for
 - Mentoring research scholars
 - Submitting research proposals and receiving grants from external agencies for research projects
 - Obtaining patent rights for innovative ideas/products
 - Publishing papers in Journals and conferences proceedings
 - Authoring books and book chapters
 - Receiving research awards from recognized bodies.
 - Receiving Seminar/Conference/FDP Grants

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	
Any additional information	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in

Lakhs)

Response: 38.15

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2020-21	2019-20	2018-19	2017-18	2016-17
71.15	56.65	8.3	19.5	35.16

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	<u>View Document</u>
Any additional information	View Document

3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Response: 0.29

3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

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

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers	View Document

3.2 Resource Mobilization for Research

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

Response: 415.67

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

2020-21	2019-20	2018-19	2017-18	2016-17	
105.333	14.727	90.395	157.897	47.32	

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

3.2.2 Percentage of teachers having research projects during the last five years

Response: 5.02

3.2.2.1 Number of teachers having research projects during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
16	16	14	18	6

File Description	Document
Names of teachers having research projects	View Document
Link for additional information	View Document

3.2.3 Percentage of teachers recognised as research guides

Response: 22.87

3.2.3.1 Number of teachers recognized as research guides

Response: 67

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Any additional information	View Document
Link for additional information	View Document

3.2.4 Average percentage of departments having Research projects funded by government and nongovernment agencies during the last five years

Response: 64

3.2.4.1 Number of departments having Research projects funded by government and nongovernment agencies during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
8	7	6	6	5

3.2.4.2 Number of departments offering academic programes

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

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Any additional information	View Document
Paste link to funding agency website	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Response:

Ecosystem for Research

Ten departments are recognized as research centres by Anna University. 64 faculty members are recognized supervisors of Anna University and they are guiding 26 full-time and 185 Parttime Ph.D. scholars in niche research areas like Drug and Vaccine design, Vehicle Dynamics, Chemical Process analysis and Simulation, Machine Learning, Cloud Computing, Smart grid and renewable energy, Nano Electronics, RF and Antenna Design and Engine testing. Also, Centers of Excellence in thrust areas like Nanotechnology, Computer Integrated Manufacturing, and Data Science have been established to provide a conducive ecosystem for the promotion of research.

Ecosystem for entrepreneurship and Incubation

An Entrepreneurship Development Cell (EDC) which was established with funding from NSTEDB -DST has been upgraded into an Entrepreneurship Promotion and Incubation Center (EPIC).

Activities for promoting entrepreneurship are carried out under various schemes of State and Central Governments. Students are provided with opportunities to interact with entrepreneurs through various events. Value-added courses titled "Basics of Entrepreneurship Development (VC18005)" and "Advanced Entrepreneurship Development (VC18006)" are offered in the Regulation 2018 curriculum to impart knowledge on entrepreneurship.

The MSME, GoI recognized the institution as a Technology Business Incubator in the year 2015 through which the following schemes are implemented:

- Support for Entrepreneurial and Managerial Development of SMEs through the incubator
- Developing student entrepreneurs -Special scheme of Tamilnadu Co-operative Milk Producers Federation Limited (AAVIN)
- Pradhan Mantri Yuva Yojana (Entrepreneurship Education & Training)
- Pre-incubation Services

In continuation of the recognition of SVCE-EPIC as a Knowledge Partner by EDII, Govt. of Tamil Nadu, a project titled "Development of Wear Resistant and Insulating Coating for Non-Ferrous Alloys" has been approved for a pilot plant development under the Innovation Voucher Programme with funding of Rs.4.34 Lakhs.

Community Orientation

With an aim to provide technical skills to the unemployed youth, Skill Development Programs on Field Technician - Computing and Peripherals, Automotive Service Technician, Lathe Operator, and Fruit Pulp Processing Technician have been conducted for 108 persons under Pradhan Mantri Kaushal Vikas Yojana (**PMKVY**) scheme.

Ecosystem for Innovation

Faculty research day and Students research day (SVCE INNOVATES) are conducted every year to bring out innovative ideas from faculty and students. SVCE-Science Club nurtures innovation among students through various events. Faculty members and students are encouraged to file patents. A total of 54 patents have been filed out of which, 30 are published and 12 are granted.

Institution Innovation Council has been constituted in our college as per the guidance of the Ministry of Education Innovation Cell (MIC), to create a vibrant innovation ecosystem. IIC has earned Five Golden Stars (Maximum Star Rating) and it is among the top five performers in Southern/SRO zone during the academic year 2019-2020.

SVCE has been placed in the band **EXCELLENT** in the ARIIA Ranking 2021 under the category of selffinancing colleges. The Institution has been selected as a Mentor Institution with funding of Rs.2 Lakhs, from among the top 50 Institutions across the country in September 2021. Faculty and Students participated in MoE IIC competitions and won prizes.

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

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.

Response: 412

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17	
178	85	56	54	39	

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

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

Response: B. 3 of the above

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

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/ supervisors provided at 3.2.3 metric) during the last five years

Response: 2.33

3.4.2.1 How many Ph.Ds are registered within last 5 years

Response: 147

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

Response: 63

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

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

Response: 2.03

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

187	95	85	87	112	
10-					_
2020-21	2019-20	2018-19	2017-18	2016-17	

3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years

Response: 0.37

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

2020-21	2019-20	2018-19		2017-18	2016-17	
44	22	17		16	5	
File Description Document						
File Descriptio	n		Docum	ent		
-	on chapters in edited vo	olumes / books		ent Pocument		

3.4.5 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response:

File Description	Document
Bibliometrics of the publications during the last five years	View Document

3.4.6 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Response:			
File Description	Document		
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document		

3.5 Consultancy

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 14.48

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2020-21	2019-20	2018-19	2017-18	2016-17
1.34468	1.79137	4.39094	1.13112	5.8249

	1
File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document
Any additional information	View Document

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

Response: 210.11

3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17	
62.63995	21.39013	26.25535	24.4935	75.3357	

File Description	Document
List of facilities and staff available for undertaking consultancy	View Document
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	<u>View Document</u>
Any additional information	View Document

3.6 Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community, sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Response:

SVCE is a pioneer in involving students in extension activities and in the process sensitizing the students to societal needs and nurturing their holistic personalities. The management encourages active participation in NCC, NSS, YRC, RRC, and Rotaract clubs. The following are some of the events that were conducted covering the following themes:

Health Care

- **Blood donation:** Over 2,000 units of blood were collected in five camps and donated to voluntary groups and government hospitals. All clubs were appreciated and awarded for this overwhelming response in these blood donation camps.
- **Disease awareness program:** YRC conducted three online programs on COVID'19 to 578 participants. An herbal concoction was distributed to the people of the neighboring village to prevent dengue fever. Awareness programs on Pandemic and Endemic diseases were organized with the help of 173 YRC Volunteers.
- **Polio drops:** Nearly 600 children benefited through five pulse polio immunization camps conducted by 130 volunteers along with the Public Health Department, Tamilnadu.

• Health care events:

- In 2019, Rotaract Club conducted an Eye donation awareness camp in which 100 screenings were done and 41 spectacles were provided free of cost.
- YRC conducts First aid training programs regularly.
- AIDS awareness rally was organized by RRC and NCC.

Clean water

- NCC conducted Jal Shakti Abhiyan and a rainwater harvesting awareness program for 50 cadets.
- A drinking water pond cleaning program was conducted in neighboring villages by 53 NSS Volunteers.
- Pollution remediation: 26 Marine Engineering students assisted in cleaning the oil spill at Ennore Port in January 2017 and recovered nine tons of oily sludge. The efforts of the students were recognized by the Government of Tamil Nadu.

Clean air

- **Tree plantation:** Nearly 200 tree saplings were planted by NSS Volunteers in the neighboring Villages.
- Plastic-free Campaign:
 - 36 NCC cadets took a Pledge for Plastic Free India.
 - 98 YRC volunteers attended Plastic Free Zone Awareness Program addressed by the Chairman, Indian Red cross society

Hygiene

- Swachh Bharath campaign was organized by NSS volunteers in the neighboring village.
- Swachh Samaroh was conducted on the 6th and 7th February 2020 with 29 Cadets at Lakshmi Narayana Temple, Melvenbakkam village.
- Swachh Bharath summer internship Programme was attended by 50 NCC army cadets from 18th to 27th June 2018 at Mambakkam Village. Cleaning of the streets, water bodies, schools, and temples were carried out. Around 5,000 residents of the village benefitted.

Societal developments

- The 'SoS-Save Sparrow' app was developed by the Eco-club in association with the Trust for Environmental Monitoring and Action Initiating (EMAI) to map the dwindling sparrow population.
- Students developed an application 'E beat' to assist the police on-duty for the Tamilnadu Police department.
- 'Turtify' app was developed by students for the Department of Forest, Tamilnadu Government for the conservation of Olive Ridley Sea turtles.
- NCC Cadets from SVCE were involved in crowd control during the Athivaradar festival held once in 40 years.
- Libraries were established in five Government schools.
- Computers and Projectors were donated to nearby Government schools.
- An Artificial Intelligence-based Autonomous drowning rescue device was developed and deployed.

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

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

Response: 10

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

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

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	View Document

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

Response: 44

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

2020-21	2019-20	2018-19	2017-18	2016-17
5	9	7	11	12
File Description			Document	
Reports of the event organized		View Document		
Number of extensi conducted with inc		U	View Document	

 five years
 View Document

3.6.4 Average percentage of students participating in extension activities listed at **3.6.3** above during the last five years

Response: 43.89

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
2576	1572	1932	1939	709

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

3.7 Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on -the-job training/ project work

Response: 429.6

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on -the-job training/ project work

2020-21	2019-20	2018-19	2017-18	2016-17
540	250	345	783	230
Tile Description	on		Document	
Number of Collaborative activities for research, faculty etc				
	laborative activities	for research,	View Document	7
		for research,	View Document View Document	

3.7.2 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: 60

3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
23	3	13	7	14

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 Institutions etc during the last five years	View Document
Any additional information	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

The institution has adequate infrastructure and physical facilities for teaching and learning as per the requirements mandated by statutory bodies.

Classroom and laboratory have the following facilities:

- Equipped with internet connectivity and LCD Projectors with speakers to enhance the experience of interactive learning.
- Interactive flat panels to actively engage the students in collaborative learning and to increase the classroom productivity.

Computing facilities:

- SVCE has a department of Information Management System which administers the Campus Management System (ERP) along with the purchase and maintenance of computers and software, CCTV and campus-wide networking with an aim to provide seamless network connectivity and computing support at all times.
- The entire campus is Wi-Fi enabled with a maximum bandwidth of 500 Mbps augmented additionally by broadband connections with speeds of 200Mbps and 30Mbps.
- "G Suite-Enterprise for Education" licensed-google classroom facility.
- MATLAB campus wide license with tool-boxes covering all programs.

Library facilities:

- Dr. A.C. Muthiah Central Library is the knowledge hub of SVCE and is vital for the research and learning ecosystem.
- It is a state-of-the-art hybrid library established at a cost of Rs.10.67 crores and is housed in a centralized air-conditioned three-storeyed building spread across 4900.75 sq.m to foster a suitable ambience for reading and referencing.

The institution exceeds the quantum of facilities prescribed by the statutory bodies as evident from the following tables:

S.NO	Particulars	Level	Expected area *	Actual area (Sq.m)
			(Sq.m)	
1	Classroom	UG	3630	6587
2	Tutorial Room	UG	462	921
3	Seminar Hall	UG/PG	132	2137
4	Additional workshop	UG/PG	200	800
5	Drawing Hall	UG/PG	396	420
6	Workshop	UG/PG	600	887
7	Laboratory	UG	5412	10884
8	Classroom	PG	462	538
9	Laboratory	PG	858	1704
	Total		12152	24878

Table 1- Classroom and laboratory facilities

*As per the requirements of AICTE / Anna University

Table 2- Computing facilities

S.No	Particulars	Required *	Available
1	Internet Bandwidth	100 Mbps	500 Mbps
2	Printers	42 Nos.	98 Nos.
3	A1 size colour printers	0	1
4	Number of PCs in Language lab	20 Nos.	100 Nos.
5	Licensed Application S/W	20	91
6	Licensed System S/W	3	17
7	Total No. of PCs	826	1574

*As per the requirements of AICTE / Anna University

Table 3- Library facilities

S.No	Particulars	Required * (Nos)	Available
			(Nos)
1	Volumes	45800	104896
2	Titles	12700	27174
3	Journals	174	1527
4	Library Management Software	1	1
5	Reading room seating capacity	150	300
6	Multimedia PC	10	75
7	Library and Reading Room (Sq. m)	1118	4900.75

*As per the requirements of AICTE / Anna University

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

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

Response:

The institution focuses on the overall development of the students and hence infrastructure for sports and extracurricular activities are given prime importance.

Outdoor sports facilities

- The institution has set up exclusive grounds and courts for Football, Tennis, Volleyball, Basketball, Ball Badminton, Handball, Throwball, with a total area of 15 acres.
- The institution has a well-established cricket ground with pavilion, Turf Matting and two practice nets. A Turf ground of radius 80m from the centre wicket having is available. The ground has provision for 3 wickets of standard size, capable of hosting professional tournaments.
- Shot-put, javelin, hammer throw, discus throw, long jump, triple jump, high jump stand, crossbar with mat, pole vault uprights, hurdles (30nos), victory stand, starting block and starting pistol are available to train the students for athletic events. A 400 m track field with 8 lanes is also available for athletics.
- A cement court for basketball is available in the campus for training students for the tournaments.
- A Swimming pool of 400 Sq.m and 3 to 10 feet depth is available in the campus.

Indoor sports and health facilities

- Indoor gymnasia are separately available for girls and boys with a total area of 270 sq.m. They are equipped with the following facilities: treadmill, elliptical cross trainer, up-right bike, spin bike, functional trainer, multi press, leg press, AB crunch, abduction, chest press, leg extension, pull down, dumbbell, weight plates, gym ball, aerobic stepper, body solid, weight lifting rod, forearm curl and wall pulley.
- A basketball court with wooden flooring, space to play Badminton, Table-Tennis, and board games with a total area of 1650 sq.m is available in the campus.

Utilization

- Apart from the students, the cricket ground is utilized by the clubs that are a part of the Tamil Nadu Cricket Academy and also by the corporates.
- The institution hosts an Inter Engineering Tournaments like "Dr. A. C. Muthiah Rolling Trophy" for cricket, SVCE Rolling Trophy for Basketball, in addition to hosting zonal tournaments in Volleyball, Ball badminton, Football for men and Throwball for women and intramural tournaments.
- Our students take part in the Zonal, Inter zonal, Inter-University tournaments and represent Anna University in various tournaments at national and international level and also in the TIES

(Tamilnadu Inter Engineering Sports).

- An indoor auditorium with audio-video facilities, and an open air theater with 4382 sq.m area along with two halls with a total capacity of 400 are available for facilitating cultural activities in the campus.
- The multipurpose hall with wooden flooring is also used as a venue for organising major events like international day of yoga.

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

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (*Data for the latest completed academic year*)

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 100

File Description	Document	
Upload any additional information	View Document	
Institutional data in prescribed format	View Document	
Paste link for additional information	View Document	

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

Response: 60.47

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

2020-21 2019-20 2018-19	2017-18	2016-17
146.50 1196.37 1855.64	1583.04	1817.06

File Description	Document
Upload Details of Expenditure, excluding salary during the last five years	View Document
Upload audited utilization statements	View Document
Upload any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

The Central Library has been fully automated since December 2002 with AutoLib Software and it was updated with a Web-based version in July 2018. The library resources are made available at a cost of Rs.**10.67 crores.**

The library migrated to Cloud-based Library Management System (LIBMAN) software which is a part of Enterprise Resource Planning (ERP) software, in December 2020.

- Name of ILMS software : AutoLib Software
- Nature of automation : Fully automated
- Version : Web-based
- Year of Automation : December 2002
 - AutoLib Software : Year of Updation 2018
- Updation of AutoLib Software

: LIBMAN (Library Management System software in

- Name of ILMS software **ERP**)
- Nature of automation
- Version
- Year of Automation
- : Fully automated : Cloud-based
- : December 2020

Features of Library Automation

- 1) Acquisition and Cataloguing
 - Cataloguing of books
 - Barcode Access

2) Circulation

- Issue/Return of books
- Renewal and reservation through remote access
- Mobile App (M-OPAC) for renewal, reservation and transaction history

• e-Mail and SMS alerts for library transactions and reminder for renewal

3) Web OPAC (Online Public Access Catalogue)

- Simple and advanced search facilities for books and journals
- Book renewal
- Book reservation
- Information on new arrivals

4) Serial Control: Cataloguing of Journals.

5) Visitor Management: Check-in and Check-out of Users.

6) MIS (Management Information System) Reports- Statistical report generation for different requirements.

Equipment used for Library Automation

- Server = 1 No.
- Computer = 50 Nos.
- Barcode Label Printer = 2 Nos.
- Barcode Scanner = 10 Nos.

Library Features

- Wi-Fi and IP Connectivity enabled
- Digital Library
 - eJournals International (1387 Nos.)
 - (IEEE Xplore ASPP, ASCE, ScienceDirect, Springer, Nature, Scientific American & Scientific American Mind)
 - eBooks (1969 Nos.)
 - SVCE Faculty Videos
 - NPTEL Resources (Dedicated server)
 - Archives of Previous Semester Question Papers
 - National Digital Library of India (NDLI)

3) ICT enabled Seminar & Conference Halls

4) ICT equipment used to create digital contents

- Interactive Flat Panel
- Video streaming equipment
- High speed flat-bed scanner

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

4.2.2 Institution has access to the following: **1.** e-journals **2.** e-ShodhSindhu **3.** Shodhganga Membership **4.** e-books **5.** Databases **6.** Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e-books , e- ShodhSindhu, Shodhganga Membership etc	View Document

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

Response: 43.09

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

2020-21	2019-20	2018-19	2017-18	2016-17
37.91	40.79	41.28	46.04	49.42

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document
Audited statements of accounts	View Document
Any additional information	View Document

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

Response: 19.65

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

Response: 776

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 has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities

Response:

The institution has a strong IT policy with a commitment to provide, maintain, and ensure the availability of legally appropriate IT infrastructure including 24×7 Wi-Fi, certified center for National Cyber Safety and Security Standard (NCSSS), CCTV surveillance system and Bio-metric attendance system with the state of the art technologies.

- A campus wide **Wi-Fi network** is established with **174 high-end Cisco access points** at an expense of **Rs. 97 lakhs**.
- Two internet lines leased from TATA (500 Mbps) and BSNL (30 Mbps) are subscribed for internet services. A BSNL Broadband connection with a capacity of 200 Mbps is subscribed for administrative purpose exclusively. The college has spent around Rs. 99.74 lakhs for internet services since 2016.
- A well-structured LAN network is established at the expense of **Rs. 28.24 lakhs.** The network is managed by a well-designed network policyandequipped with **4900 I/O points, More than 145 Cisco network switches, and over 30 VLANs.** A Dynamic Host Configuration Protocol (DHCP) is enabled to manage Wi-Fi users.
- A separate network for CCTV applications with Secure Sockets Layer –Virtual Private Network (SSL-VPN) service is established at an expense of **Rs. 50.34 lakhs.** The network is equipped with **31 switches**, **547 CCTV cameras**, and **44 DVR**, covering the entire campus.
- Annual maintenance contract (AMC) for networking, Wi-Fi equipment, LCD and CCTV are outsourced to the service provider. The college has spent around **Rs. 63.8 lakhs** for the AMC since 2016.
- All academic and administrative activities are **managed** with the help of Campus Management System (CMS), deployed in Microsoft Azure Cloud servers. The college has spent over **1.2 crores** for the ERP since 2016.
- The institution is a center for National Cyber Safety and Security Standards (NCSSS) since 2016.
- The internet access is managed with the help of a Radius server and a firewall policy. A **Fortigate-300D firewall** is installed at the gateway.
- The institution deploys network security tools such as firewall and antivirus software to safeguard the network from cyber security threats like intrusion and spam emails. All the computers are **protected with antivirus software** (Symantec & Kaspersky) with regular updates. The college has spent around **Rs. 16.03 lakhs** on firewall, anti-virus and NCSSS **to defend cyber threats** since

2016.

- G-Suite Enterprise for education license was procured in 2020-21 and the college has spent around **Rs.11 lakhs** for facilitating online events and teaching learning process.
- The department of Information Management System (IMS) carries out the purchase of IT infrastructure components and their licenses. College website is hosted on a high end server in the college premises.
- All employees and students are provided with user credentials. A dedicated Service Set Identifier (SSID) is provided to the guest users.
- All employees and students are provided with a unique email ID under the institution domain. Multicast and broadcast groups are deployed with appropriate privileges.

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

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

Response: 2:1

File Description	Document
Upload any additional information	View Document
Student - computer ratio	View Document

4.3.3 Bandwidth of internet connection in the Institution.Response: ?50 MBPSFile DescriptionDocumentUpload any additional informationView DocumentDetails of available bandwidth of internet
connection in the InstitutionView Document

4.3.4 Institution has the following Facilities for e-content development

- 1. Media centre
- 2. Audio visual centre
- **3.Lecture Capturing System(LCS)**
- 4. Mixing equipments and softwares for editing

Response: B. 3 of the above	
File Description	Document
Upload Additional information	View Document
Institutional data in prescribed format	View Document
Link for Additional information	View Document

4.4 Maintenance of Campus Infrastructure

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

Response: 61.84

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)

2020-21	2019-20	2018-19	2017-18	2016-17
1176.28	1490.24	1410.88	1361.96	1058.94

File Description	Document
Upload any additional information	View 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 institution adopts a set of well-defined policies to maintain and optimize the use of physical, academic, and support facilities.

- The **classrooms** are cleaned daily and well equipped with furniture, electricity, black board and projector. Any electrical fault is addressed immediately through well defined procedures. The electrical appliances are turned off when not required.
- Laboratory and workshop equipment is maintained under the supervision of a Lab in-charge. The technicians repair any minor fault in equipment and in case of major faults; the repair is carried out by the supplier/manufacturer. After annual stock verification, the obsolete equipment recommended

by the duly appointed committee is disposed by the maintenance department and the stock register is updated accordingly.

• Information Management System (IMS) facilitates the departments in the purchase, maintenance and disposal of **computers** and related accessories. Antivirus software and firewalls are installed and periodically updated to ensure system security. Students and faculty members are provided with login credentials to prevent unauthorized intranet and internet access.

Library

- Students and employees are entitled to borrow books as per the following norms: Assistant Professors-10, Associate Professors-12, Professors-14 and Instructors/supporting-staff-5 and students 7/8. Journals, Periodicals, Back volumes, and reference books are not issued.
- Book reservation and renewal are allowed through online/telephone/physical modes. Fine is imposed in case the books are damaged/lost.
- The Barcode Technology, a digital-transaction method for charging and discharging of books facilitates easier and faster transaction.
- Bibliographical detail of books is entered into the cloud-based database (ERP) for easy retrieval, renewal and reservation of books from home.
- Digital Library collection and Library Web Page is updated periodically with the latest information. Stock verification is carried out at the end of the Academic Year. Well defined policies are adopted for book purchase, book recovery, and issuing NO DUE certificates.

All the **audio-visual equipment** are under Annual Maintenance Contract (AMC). The LCD projectors and audio systems are checked periodically. Any issues are registered through ERP and are rectified by technicians. A standby LCD Projector is substituted in place till the defect is resolved.

CCTV Surveillance Camera

The campus is equipped with 547 CCTV cameras. All the cameras are under AMC. The cameras are checked by a team of **5** technicians deployed by the contractor on a daily basis under the supervision of incharge. The major equipment are maintained / serviced as per the standard procedures. Faults are rectified at the supplier's location and are tracked through returnable Gate Pass. Monthly report on the service status of cameras is submitted to the Principal.

Medical Centre

First aid boxes are installed at various places and are inspected and the contents are updated periodically. Equipment like digital weighing machine, blood pressure monitor, blood sugar measuring instrument, infrared thermometer are checked periodically and made available for regular health check up. Wheel chair and Concrete ramp facility are maintained for physically challenged and injured.

Electricity and Generators

Electricians with 'B'-License are available **in the campus 24X7 on shift basis**. The campus is equipped with **3** (500 KVA, 500 KVA & 380 KVA) generators with a total capacity of **1380KVA**. Standby power generators are switched on during power failures, Complaints received through ERP modules are registered and addressed immediately. AMC with authorized service providers is signed for the upkeep of generators.

Air Conditioner facility

The campus is equipped with 600 tons of Air Conditioners installed at various places. Periodical preventive maintenance is carried out regularly. Complaints received through ERP module are registered and addressed immediately.

Elevators Facility

Two elevators with capacities of 20 and 10 persons are installed at the classroom block and Central Library respectively. Lift license and insurance are renewed periodically. AMC with authorized service providers is signed for the upkeep of elevators.

Plumbing and Carpentry

All replacement and repair activities and additional services are addressed through ERP. The in-house plumbers monitor the pipe lines for leakages and maintain regularly to ensure proper water supply.

Housekeeping

Regular campus maintenance like cleaning of doors, windows, washrooms, sweeping and mopping of the floors are carried out daily with the support of 87 (College 73 and Hostel 14) workers, monitored by 4 supervisors. AMC is signed with a service provider to ensure proper maintenance. Record of cleaning work is maintained.

Gardening

The garden supervisor ensures the removal of dry leaves, watering the plants daily, and cropping the plants periodically and maintaining the gardening equipment with the assistance of 14 workers.

College Transport

The maintenance of college transport is carried out through a service provider. Buses are equipped with first-aid box. Vehicle Insurance, fitness certificate, road tax, and permit are maintained and renewed as per the government norms.

Sewage Treatment and Reverse Osmosis Plants

AMC is signed with a service provider for proper maintenance of STP and RO. Cleaning of RO membranes and STP tank is carried out periodically by 4 workers under the supervision of the Estate Manager. Record of service and maintenance are kept.

Swimming pool

A 16×25 feet Swimming pool with chlorinated water is maintained periodically by 3 workers. The pool is maintained for its full capacity twice a week.

Canteen

- The canteen is spread over three floors and is maintained clean at all times with the support of 13 housekeeping workers.
- The utensils are cleaned by an automatic dishwasher with a capacity to wash **150 plates at once**.
- Registers are maintained for feedback on cleanliness and suggestions by the users.
- RO water is used for preparation of food and drinking purpose.
- A full time Canteen Manager is available in the canteen to supervise the functioning of the canteen. Members of Canteen Committee conduct inspection regularly and submit their findings.

Safety and Security

The campus is equipped with 347 fire extinguishers installed at various places and serviced as per the specifications. The campus has deployed 36 security personals across various places.

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

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 29.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
1061	1172	1257	1218	1211

File Description	Document	
upload self attested letter with the list of students sanctioned scholarships	View Document	
Upload any additional information	View Document	
Institutional data in prescribed format	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 and non-government agencies during the last five years

Response: 7.79

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

2020-21	2019-20	2018-19	2017-18	2016-17
210	238	389	391	371

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Institutional data in prescribed format	View Document

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

Response: A. All of the above		
File Description	Document	
Details of capability enhancement and development schemes	View Document	
Any additional information	View Document	
Link to Institutional website	View Document	

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Response: 99.23

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

2020-21	2019-20	2018-19	2017-18	2016-17
3652	3850	4106	4207	4314

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

5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies

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

Response: A. All of the above

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

5.2 Student Progression

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

Response: 29.28

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

2020-21	2019-20	2018-19	2017-18	2016-17
294	312	318	350	324

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

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

Response: 13.01

5.2.2.1 Number of outgoing student progressing to higher education.

Response: 137

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: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 97.06

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

2020-21	2019-20	2018-19	2017-18	2016-17	
121	135	129	108	135	

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

2020-21	2019-20	2018-19	2017-18	2016-17
137	135	133	108	135

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

5.3 Student Participation and Activities

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

Response: 73

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17	
6	25	15	14	13	
File Description			Document		
Number of awards/medals for outstanding performance in sports/ cultural activities at inter- university / state / national / international level during the last five years		View Document			
	e-copies of award letters and certificates				

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

Response:

Since the inception of the institution, an active Student Council has been a part of the academic and administrative committees of the college. The members of the council are elected democratically and serve as a bridge between the students and the management. Student Council is encouraged to express its opinion and suggestions without any inhibitions.

Composition:

- President: IV Year UG
- Vice President: IV Year UG
- General Secretary : III Year UG
- Joint Secretary: III Year UG (Girl student)
- Sports Secretary : III Year UG
- Treasurer: II Year UG
- PG Representative: II Year PG
- Class Representative(s): All UG and PG Classes

Responsibilities:

- To interact with the student representatives to represent their peers' opinions and interests and provide constructive feedback from the learner's perspective on program assessment strategies, academic schedule, training programs, etc.
- To work with the faculty coordinators and students and organize events such as Teachers' Day, Sp

orts Day, Cultural Fest (Highways), Students' Research Day (SVCE Innovates) and other Technica l/Non-Technical Events.

Role in Academic Committees:

- **Class Committee:** Student representatives are members of the class committee which meets thrice a semester to improve the teaching-learning process.
- Library Committee: The student council is part of the committee and convenes a meeting once a year to suggest book titles, and learning materials and improve other facilities.
- **Institution Innovation Council (IIC):** Eight to ten student representatives from each department are part of the IIC. He/She plays a role in disseminating the activities of IIC and motivates the students to participate in various events organized under IIC.
- Entrepreneurship Promotion & Incubation Center (EPIC): Student representatives including student council members are part of EPIC. They are trained by MSD- GoI and they coordinate all the activities.
- **Internal Quality Assurance Cell**: A student is also included as a member of the cell and plays a key role in improving the quality of teaching-learning process by giving students' perception.

Role in Administrative Committees:

- **Sports Committee:** Sports secretary is involved in organizing and promoting various sports activities.
- Anti-Ragging Committee: The students' council takes part in all the meetings which aim to ensure a ragging-free campus.
- **Transport Committee:** One representative from each of the years coordinates with the transport convener for the smooth and efficient operation of transport services.
- **Canteen Committee:** The student council represents peers' views on the expected variety of food items and takes part in the discussions related to price fixation.
- Hostel Committee: A final year student and a PG student are part of the men's and women's hostel committee respectively. They convey their peer's views on the facilities and expected menu.
- Internal Complaint Committee: The President and General Secretary of the student council take part in the meetings and suggest measures to prevent sexual harassment and other related issues.
- Women Empowerment Cell: The Joint Secretary of the student council coordinates with the cell and facilitates women empowerment through awareness programmes.

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

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 9.8

3.3.1 Numbe uring the last	-	ural events / com	petitions organised by	y the institution year - wis
2020-21	2019-20	2018-19	2017-18	2016-17
5	11	12	11	10
ile Descriptio	n		Document	
Report of the e			Document 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 other support services.

Response:

The institution has a registered Alumni Association (Sl. No. 44/2011, Registered under The Tamil Nadu Societies Registration Act 27 of 1975). It is involved in various activities and contributes significantly towards the development of the institution through financial and other support services. The various activities in which the alumni association is involved are as follows:

Financial Support

• Scholarship for needy students

The First Batch (1985-89) of Alumni instituted a scheme in the year 2018-19 to provide financial assistance to the needy students. This scheme is to provide tuition fees to two to four girl students from their Second year to their Final year of study. The students are selected based on their economic background and academic performance in their first year of study. So far **Rs.7,42,500**/- has been disbursed to the identified students.

• Budding Bright Engineers Award

The association has instituted this award for two meritorious students of the first year from each UG program every year. **Rs.2,55,000**/- has been disbursed to the identified students in the last 5 years.

• Infrastructure Development

The association has supported in augmenting the facilities of the digital library housed in Dr. A.C. Muthiah

Central Library. **Rs. 5,18,000/-** has been provided by the alumni association during the year 2016-17 and 2017-18.

Other Supports

Alumni association plays a significant role in promoting Innovation and Entrepreneurship in two ways:

• Incubation

The alumni association promotes the specific activities of the Entrepreneurship Promotion and Incubation Centre (EPIC) to help the students to acquire and hone entrepreneurial and technical skills. It also supports in establishing adequate physical infrastructure facilitie s for prototype development. Some Alumni use the incubation center to setup their startups. For instance, *Campus Avenue* is a startup that was incubated in the campus by the alumni Shriniketh Krishnan, Abinesh Saravanan and Vigneshwaran Muthukrishnan of the 2013-17 batch.

• Entrepreneurship Assistance

The college always promotes the spirit of entrepreneurship among students. Alumni Entrepreneurs share their experiences and motivate the members of the center to setup their start-ups. To cite an example, Mr. Gokul Santhanam and Mr. Pravin Shekar of the 1992-96 batch mentored the student council of the year 2021-22 to setup their startup *Envoi*-An online Merchandize for the student community.

• Technical Support - Hackathon

The alumni association extends its support in conducting various technical events and Hackathon by mentoring the participants technically. They also serve as judge s for the events.

• Guest Lectures and Career Counselling

Technical lectures are delivered to update the students with the latest technological trends. They share their success stories and motivate and groom the students holistically. The alumni association also schedules career guidance sessions by the alumni.

• Internships, Projects and Placement

The alumni support in providing internships, mock placements, industrial visits, project assistance and encourage employee referrals. These steps help in increasing the employability of the students. Alumni entrepreneurs recruit students based on their skills into their organizations.

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

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

Response: A. ? 15 Lakhs

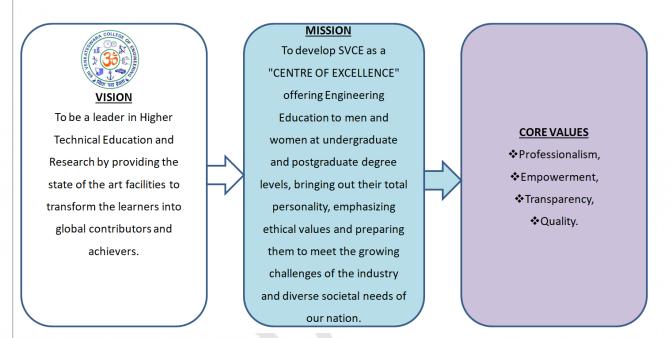
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File Description	Document
Any additional information	View Document
Link for additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:



Vision

• To be a leader in Higher Technical Education and Research by providing the state of art facilities to transform the learners into global contributors and achievers

Mission

- To develop SVCE into a Center of Excellence offering Engineering Education to men and women at undergraduate and postgraduate degree levels.
- To bring out their total personality, emphasizing ethical values.
- To prepare them to meet the growing challenges of the industry and the diverse societal needs of our nation.

Governance

The statutory apex body of the institution is the Governing Council which administers the activities of the institution to nurture an environment through which the Vision of the institution is achieved through a well-planned mission.

The Vision and Mission statements of the institution are in line with the aspirations of the Chairman of the Governing Council of the institution, Dr.A.C.Muthiah, Chairman Emeritus, SPIC limited, a renowned Industrialist and philanthropist. With able experience in the governance of various industries and charitable educational institutions, he has been governing SVCE with great dedication and focuses on achieving the

Vision.

Perspective Plan

Based on the Vision of the Institution, the Management focuses mainly on the following three mission activities as a part of its prospective plans to make SVCE a Centre of Excellence in Higher Technical Education and Research, produce the best quality of scholars who can contribute to the industrial and societal needs by practicing professional ethics. This primary goal is achieved by:

- Creating outstanding facilities and Centers of Excellence in allied streams with a view to promoting Academic and Research activities in the field of Engineering and Technology.
- Offering programs and courses to develop professionalism and to enhance career prospects of the scholars in addition to imparting ethics and human values.
- Encouraging an excellent level of industrial relations to satisfy the mutual requirements and the utmost commitment to meet societal needs.

Through the regular conduct of half-yearly meetings of the Board of Trustees and Governing Council, the aspects pertaining to the achievement of the Vision are assessed and instructions pertaining to the mission to be embarked upon are disseminated from time to time.

Participation of Teachers

The institution encourages the participation of teachers in the decision-making process by giving them an appropriate presence in all statutory and non-statutory bodies that are involved in decision-making for efficient governance of the institution.

Faculty members find a place in all the bodies including the Governing Council that is involved in analyzing, planning, organizing, and provision of infrastructure, finance, and human resources based on the requirements put forth by the various Councils which are involved in the day-to-day running of the institution, by adopting a bottom-up approach.

Besides the statutory bodies such as Academic Council, the college has Staff Council, Library Committee, Sports Committee, Canteen Committee, Hostel Committee, Transport Committee, etc. These committees assess the functioning of the various support systems towards achieving the Vision of the institution through periodic meetings and submit their recommendations to the Management.

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

6.1.2 The effective leadership is reflected in various institutional practices such as decentralization and participative management.

Response:

Case study on decentralization and participative management

Decentralization

The institution follows a meticulous system of decentralized authority by conferring an appropriate degree of empowerment at various levels. Whilst ensuring that the authorities execute the tasks within the scope of their power, the Management also pitches in to support any special or additional requirements by being receptive and participative at all times.

To cite an example, the process of availing finance is described here. At the beginning of the financial year, each department prepares and proposes a budget taking into account the infrastructure requirements for academic and research purposes and human resource development activities, etc. The budget is submitted by the faculty in charge of various laboratories, courses, activities, clubs, etc., and consolidated by the Head of the Department. Thus, the involvement of Teachers is ensured in the process.

Whenever a proposal for availing finance for any activity like, equipment or books purchase, sponsorship for taking part in events, etc. is initiated, depending on the proposal amount, the approvals can be obtained at various levels as follows:

HoDs approve proposals up to Rs.20,000

Principal approves proposals up to Rs.1,00,000

Secretary approves proposals greater than Rs.1, 00,000

In case, the proposals exceed the approval limit under a particular budget head, the HODs can still make a representation to the Management through the Principal with proper justification. Upon receiving a convincing justification, approvals are generally accorded without any hassles.

In certain cases where there is a special requirement for additional funding apart from the allocation done in the annual budget, the Management never hesitates to offer the same provided there is a strong justification that supports the Vision of the institution.

The "Interdisciplinary Nano Research Center", which is evolving as a Center of Excellence was established in this way with full funding from the Management. This clearly shows the receptive nature of the Management and its participation in the growth of the institution.

Participative Management

Apart from the above case study, the Sections 5.5 and 5.6 of the ISO Quality Manual clearly define clearly the responsibility, authority communication, and review for and by various levels of authority such as Secretary, Principal, Vice Principal, Deans, HoDs, Professors, etc. which is a clear indication of the adoption of decentralized authority and the participation through the reviews.

It is pertinent to mention here that the Chairman of the Governing Council, calls for an annual meeting of all Head of the Departments and Deans to review the annual report pertaining to their portfolios and offers suggestions for improvement. The Management Review Meeting convened by the QMS coordinator is also aimed at conveying the outcome of audits to the Management for appropriate action.

File Description	Document
Any additional informatiom	View Document
Link for strategic plan and deployment documents on the website	View Document
Link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

Availability of Strategic Plan and deployment documents

The Perspective Strategic Plan and Deployment documents are available in the institution.

The "Vision 2018" and "Vision 2023", are the Five-year Strategic Planning and Deployment Documents of SVCE, that define the Strategic Plan and deployment strategies based on the Vision, Mission, and SWOC analysis.

A significant observation from these documents is that many of the major plans have been successfully implemented during the last ten years such as:

- Setting up an Entrepreneurship Promotion and Incubation Center (EPIC) to nurture Innovation and promote entrepreneurship.
- Setting up of rainwater collection pond to address the issue of non-availability of groundwater in the campus.

Building of a modern and spacious library complex to address the limited space available in the library.

- To obtain Autonomous status to improve the standard of education.
- Centers of Excellence in departments to promote Research and Consultancy.

Successfully implemented activity

The Interdisciplinary Nano Research Centre was set up during the year 2017 to foster research in the field of Nanoscience, MEMS, and Bio-MEMS.

With seed funding by the college and additionally supported by DST, GoI, the lab has been built to develop the cutting-edge technology for carrying out ground-breaking research in the area of Nanotechnology. The Interdisciplinary Nano Research center (INRC) is spread over an area of 2500 sq. ft with a clean-room facility and state-of-the-art nanofabrication and characterization facilities that provide end-to-end support for Nano-device modeling and fabrication till characterization.

The thrust areas of research carried out at the center:

- Thin-film technology and microelectronics
- Nanobiotechnology and Tissue Engineering
- Nanocomposites.

The main objectives of the center are:

- To offer student projects in the field of Nanoscience.
- To assist faculty members in the research work in the area of Nanotechnology.
- To carry out consultancy work from industries in the area of Nanoscience.
- To support the research activities of researchers from other institutions/organizations.
- To conduct short-term courses and workshops in the interdisciplinary area of Nanoscience and Nanotechnology.
- To provide end-to-end support from Nano-device modeling and fabrication to characterization.
- To offer testing facilities for researchers and students.
- Researchers of the center can pursue research at the Centre for Nanoscience and Engineering, IISC under the Indian Nano Electronics User Program (INEUP) sponsored by MHRD.
- The center also has tied up with the state-of-the-art Nanoscale fabrication facilities at the Centre for Nanoscience and Engineering (CeNSE), at the Indian Institute of Science, Bangalore.
- The total outlay of the center stands currently at Rs 1.85 crore.

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

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

Response:

Organizational Structure:

The organization is supported by five levels of hierarchy as shown in the Organogram. The administrative set up is made up of the first three levels with the Board of Trustees being the body at the first level that manages the operation of the institution along with the Governing Council which is the second level statutory apex body that carries out the planning and monitoring at the institutional level. The functional

administrative bodies at the third level are those which execute the activities pertaining to academic and day to day requirements are the Academic Council and the Executive Council respectively.

The other bodies at the functional level are at the fourth level that include the Board of Studies which approves the Curriculum and Syllabi based on the needs of the society and the Staff Council which comprises of the Deans, Controller of Examinations and the Head of the Departments that takes decisions on the academic functioning, Academic Course Committee which approves the regulations and recommendations put forth by the syllabus sub-committees, the Quality Management System which ensures the conformity of various processes through regular audits, Executive Staff who are in charge of various administrative functions and the statutory Committees such as the Finance Committee, Complaints cum Redressal Committee, Women Empowerment cell, Grievances and Redressal Committee, Anti Ragging Committee and the Disability Resource Center whose functions are as prescribed by the authorities.

Service Rules, Recruitment, Promotion, and Grievance Redressal

The service rules of the institution are made available in the website and amended from time to time based on the resolutions passed. The service rules booklet comprises of well laid out procedures for recruitment, probation, confirmation and promotion; cessation, discharge, termination, superannuation and resignation; pay and allowances; working hours, holidays and conduct, discipline and appeals.

Recruitment is done after ascertaining the vacancies in various cadres either by direct recruitment or promotion from a lower cadre as decided by the executive committee. In case of direct recruitment, the vacancies are advertised in leading daily and applications are called for from suitable persons and selection is done based on an interview by a panel of experts, including external experts. Persons already employed in the college who possess the requisite qualifications and experience and aspire to fill in the vacancies shall apply through proper channel and compete with the general pool. The pay scale fixation for the faculty members and staff will also be based on the qualification and experience possessed by the candidate.

Promotion is based on qualification, experience, service record, seniority and performance in an interview subject to openings available under each cadre after due approvals obtained from the executive committee.

Grievance redressal mechanism has a core team which is the Grievances Redressal Cell (GRC). The cell serves with the mission of upholding the dignity of the college by providing a strife free atmosphere through promotion of cordial relationship between various sections such as students, faculty and supporting staff. It also encourages students and staff to express their difficulties and seek solutions for their problems without the fear of being victimized.

File Description	Document
Any additional information	View Document
Link to Organogram of the Institution webpage	View Document
Link for additional information	View Document

6.2.3 Implementation of e-governance in areas of 1.Administration	operation
2. Finance and Accounts	
3. Student Admission and Support 4. Examination	
Response: A. All of the above	
File Description	Document
Screen shots of user interfaces	View Document
Institutional data in prescribed format	View Document
ERP (Enterprise Resource Planning) Document	View Document
Any additional information	View Document
Link for additional information	View Document

6.3 Faculty Empowerment Strategies

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

Response:

SVCE provides different welfare benefits to the faculty and non-teaching staff as given below.

Health Care

- 1. Employees of SVCE are entitled to reimbursement for medical treatment taken in a Hospital or Nursing Home for Self, Spouse, unmarried and unemployed children of the employees subject to the limit prescribed under SVCE Employees' Medical Benevolent Fund (MBF). Pre & Posthospitalization expenses are also reimbursed to the employees. An advance of 80% of the total estimated expenditure is granted before/on admission to a Hospital / Nursing home. Claims for any surgery or ailment including Covid-19 which requires hospitalization are eligible for reimbursement. The reimbursement is made at the earliest upon submission of all the documents to the MBF committee. The entire expenditure under the MBF scheme is borne by the employer. (The details of beneficiaries are furnished in additional information)
- 2. An annual subscription of Rs.10 Lakhs is paid to Apollo Shine, Apollo Hospital, Chennai for conducting periodical health checkups for employees and to conduct various health awareness programs in the Institution such as
 - 1. Women Hygiene and Safety
 - 2. First Aid and Basic Life Support training
 - 3. Health screening for students
 - 4. Breast cancer & Cervical cancer awareness program
 - 5. Covid-19 Awareness program

Insurance benefits

- 1. Group Insurance: Employees are covered under Group Life Insurance with LIC. In case of death, the family will receive an amount of Rs.1 lakh.
- 2. Personal Accident Insurance: Employees are covered under the Personal Accident Insurance scheme. In case of a fatal accident, the family gets the benefit of Rs.2 Lakhs. It also covers the employees and their family members in the event of injuries, permanent total disability, temporary total disability, or permanent partial disabilities.

Festival Advance: One month's salary is granted to the supporting staff as an interest-free loan at the time of the Diwali festival.

Transport: Employees are provided free transport facility (Bus) from their nearest location to the college and back. A cab facility is provided to HODs / Deans / Section Incharge by the Institution.

Group tour expense: The institution provides sponsorship to supporting staff towards an annual tour to relieve their monotony.

Admission to the children of employees: Children of employees are offered admission to UG / PG Programs in SVCE.

Long Service Award: To recognize the personnel who have served a long period in SVCE, a cash award is given to the employees.

Avenues for Career Development / Progression

The institution encourages teaching and supporting staff to pursue higher studies so as to ensure their career development by providing pay with leave as required. Supporting staff who joined in SVCE as Instructors and Mechanics have reached various levels in teaching positions.

Best Teacher Award

This award is given every year based on the contribution of the teacher towards in academic, research, administrative and extension activities. An additional increment is offered to them apart from the regular annual increment.

Incentives: SVCE offers incentives for paper publications in reputed journals, patents, funded projects, etc., which motivate the faculty members for their career development.

File Description	Document
Link for additional information	View Document

6.3.2 Average percentage of teachers provided with financial support to attend conferences /

workshops and towards membership fee of professional bodies during the last five years.

Response: 28.58

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

2020-21	2019-20	2018-19	2017-18	2016-17
77	72	92	76	75

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

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

Response: 27.8

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

2020-21	2019-20	2018-19	2017-18	2016-17
37	36	26	20	20

File Description	Document
Reports of Academic Staff College or similar centers	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

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

Response: 45.84

6.3.4.1 Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
198	122	118	112	81
Tile Description	on		Document	
-	Human Resource De ASC or other relevar	*	View Document	1
QAC report su	ummary		View Document	
nstitutional da	ta in prescribed form	at	View Document	
Any additional	information		View Document	
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6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Internal Audit

In order to maintain transparency and accountability in finance and management, internal audits are carried out once in 6 months. This ensures an efficient and effective way for the purpose of verification of reliability and accurateness of books of accounts and monitoring the qualitative level of internal controls by the management.

The internal audit covers various aspects such as verification of income accounted for the period, vouching of expenses including capital assets, computation of depreciation, verification of monthly statutory payments like ESI, EPF, TDS, GST, verification of existing internal controls, and suggestions for increasing the quality of the same will be informed. Expenses will be met only after due approval of the Management. Any deviation noticed is reported to the finance team for an early rectification and proper alignment of books of accounts.

External Audit

To comply with the provisions of applicable Acts, our Institution has appointed a reputed audit firm which is in the field of providing expert services relating to audits, Income tax replies, and various certifications.

The statutory audit covers all financial and accounting activities of the Institute. External Auditors scrutinize the income and expenditures of the Institution by making use of various audit procedures. Additional scrutinization is done in major areas of income for the Institution which includes a collection of fees, donations, grants, scholarships received from Government, NGOs, and various philanthropists, interest earned and return on investments, and subsequent utilization of such income for the institutional expenses which include the purchase of books, stationery, the conduct of academic and non-academic activities, payments to staff, vendors, contractors, students, and various incidental overheads. This is carried out to ensure that money spent is only for the intended and appropriate activities which are institutions and students centric.

The institution believes in fulfilling the moral and legal responsibilities of its various stakeholders. External Auditors verify whether the financial statements of the Institution are as per the reporting framework. All observations/objections of the External Auditors are communicated through their report. Objections if any, will be examined by separate Committees of the Institute Internal Audit Team, the Head of the Department concerned, and any other member nominated by the management. It is worthwhile to mention that no serious objection/irregularity has been reported.

In order to prove the transparency and completeness of functions of the institution, all communications received from Income Tax and GST authorities are dealt with in a more professional manner by the External auditors who act as the institution's power of attorney and give a timely and satisfactory reply.

So far, the Institution has received an unmodified opinion from the External auditors and no adverse comments have been received which indicates the functionality and efficacy of the financial system.

File Description	Document
Link for additional information	View Document

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

Response: 23.71

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

2020-21	2019-20	2018-19	2017-18	2016-17
0.425	1.315	1.515	19.186	1.265

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Annual statements of accounts	View Document

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

Response:

Mobilization of Funds and optimal Utilization

As a self-financing institution, it adopts a well-structured policy for the mobilization of funds.

The funds come from the following sources:

- 1. Sri Venkateswara Educational and Health Trust
- 2. Fees Collection
- 3. Scholarships provided by Charitable Trusts
- 4. Government Scholarship Scheme
- 5.CSR Funds from organizations
- 6. Funding agencies through Research and Development Projects
- 7. Industries and Individuals through Consultancy and Testing
- 8. Contribution by Alumni

The funds allocated by the trust mainly cover the operational expenditure such as the salary and infrastructure development.

The institution collects the tuition fees as stipulated by the Government norms which is paid by students on their own or through a scholarship provided by many charitable trusts. The special category of students pays their fees through Government scholarships.

For optimal utilization of resources, the resource allocation is based on the factual requirements identified in advance and proposed through a budget in the beginning of every financial year.

All departments, sections, societies, clubs etc. have to plan their annual activities based on the mandatory and optional requirements and propose an initial budget before the commencement of every financial year. This will be finalized through a discussion, consolidated and presented by the Executive Committee to Governing Council for an approval.

Upon approval, the final allocation of the budget is communicated to the users and they can utilize the fund allocated for the predefined purpose unless it is an exigency. This will be verified every time when a proposal is initiated through a justification for procurement, budget availability.

Resource Mobilization

The institution has been enjoying the goodwill of many organizations that have immensely benefitted from the contributions made by the SVCE Alumni who are in key positions. As a goodwill gesture, they always come forward to share a part of the CSR fund allocated for educational purposes to set up specialized centers in the institution to further enhance the quality of the students. Seven departments have benefitted from these kinds of specialized lab facilities created by one of the reputed organizations.

The faculty members are encouraged by the Management to submit project proposals for research and development which has resulted in the generation of quantum funding by funding agencies like DRDO, SERB, ISRO, and AICTE. These funds are properly utilized as per the norms of the funding agencies for creating new facilities.

The institution is gradually improving in the aspect of earning a sizeable income through deploying the specialized facilities created in the laboratories for testing purposes and also through consultancy work carried out with the expertise of the faculty members.

The Alumni giving back to their alma mater is visible in their contribution to the Digital Library of the college and for the installation of projectors in classrooms. They financially support underprivileged students to pay their fees.

File Description	Document
Link for additional information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle) Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Response:

Practice 1

Staff Council

The internal quality is assured by the formation of a unique Staff Council which consists of the key members of the IQAC along with the other members, who are responsible for the various activities carried out in the institution on a day-to-day basis. The meeting of the Staff Council is convened every fortnight.

The principal is nominated as the Chairperson of the staff council. In the staff council meeting (SCM), the academic and administrative issues are discussed and plan of action with the target date is fixed. The minutes of the staff council meeting contain the action taken based on the previous meeting, the discussions carried out in the present meeting and the action to be taken based on the discussion along with the deadlines. The action plan and approval shall be executed by the Principal with the consent of IQAC

composition members. IQAC initiatives are executed through the staff council.

Practice 2

Quality Management System

The Internal Quality Assurance Cell (IQAC) assures quality in the institution through the Quality Management System (QMS) processes such as process management, infrastructure, teaching-learning, students' welfare, support activities, and staff-related activities. The college has implemented QMS through ISO 9001:2015 certification.

The IQAC deployed quality circles through which quality objectives are established and the top management ensures the availability of resources required to achieve quality objectives for sustaining and improving the QMS. The academic objective (AO) through its four functional metrics aims to achieve academic excellence through fixing and achieving pass percentages at various levels of the study. The Education Objective (EO) comprises functional metrics for employment, higher studies, and entrepreneurship. As research activities form a cardinal metric by various ranking agencies, the Research Objectives (RO) through its six metrics ensure the publication of quality papers, carry out externally funded projects, retain the research center status, and ensure the existence of research supervisors to guide graduate, postgraduate and Ph.D. students for high-quality publications. The Industrial Objective (IO) and the Professional Objective (PO) now encompass supporting staff development along with faculty and students. The metrics of Industrial objective (IO) govern Industry projects, training collaboration with industry for knowledge updating and consultancy work for the industry along with the industrial exposure to students by way of industrial visits. The metrics of Professional Objective (PO) caters to the quality metrics of acquiring the higher qualification, participation in seminars, organizing workshops, seminars, and conferences, and leadership skill development for higher echelons of faculty hierarchy. The quality objective leaders aim to achieve the set target for each objective to analyze the deviation and ensure to put into practice corrective measures to fill the lacuna in achieving the target IQAC. Consistent achievement of set target prompts the IQAC to revise the objective by setting higher standards thereby sustained quality initiatives are in place thus ensuring quality in all aspects and activities of the college which makes it distinctively unique among higher education institutions of the state.

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

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

IQAC conducts institutional reviews on the teaching-learning process periodically with a help of the staff council.

Example 1: Teaching and Learning

Academic Calendar: The Academic Calendar is prepared by the controller of the examinations and published on the college website. Subsequently, the departments would arrive at the semester Time Table well in advance at the start of the semester.

Lesson plan and Lab plan: The lesson plan and lab plan are prepared by the faculty members before the commencement of classes. The lesson plan is reviewed by the module coordinator and finally signed by the head of the department. The completed lesson plan is mailed to the students and also posted on the department web page.

Record of classwork: All Faculty members maintain an Attendance and Assessment Record (AAR) to make entries of students' attendance, scores of assignments, and continuous assessment test.

Based on the Continuous Assessment Test(CAT) performance the slow learners are identified and remedial measures are carried out. The progress of the course coverage is periodically monitored by the HoD for an effective teaching-learning process.

Faculty Advisor: The Institution has a formal mentoring system to cater to the needs of all the students. For every 20 students, a faculty member is assigned as a Faculty Advisor who monitors and guides them throughout their period of study.

Class Committee Meeting: Three class committee meetings, represented by the class representatives, class committee chairperson, faculty advisors, and subject handling faculty members, are organized in a semester to discuss all the academic-related issues and to take corrective measures.

Evaluation of teachers by students: The institution has a feedback system to evaluate the teachers by students on teaching methodologies, course delivery, and difficulties faced in the subject. IQAC analyses the feedback and takes appropriate corrective actions.

Example 2 : Outcome-Based Education(OBE) implementation

Outcome-based education is student-centric instruction that focuses on measuring student performance i.e. outcomes that comprise knowledge, skills, and attitudes.

Course Outcomes (CO) are defined for each course; Program Outcomes (PO) are adapted from graduate attributes; Program Specific Objectives (PSOs) are formulated by a team of senior faculty members of the program at the curriculum design stage.

Through CATs and end semester exams the attainment of COs and PO/PSOs are evaluated. Curricular gaps if any are identified and corrective actions are implemented in the subsequent curriculum revision.

The IQAC of the college has established a feedback system for collecting feedback from the stakeholders. This helps in indirectly finding the attainment of COs/POs/PSOs. The findings are discussed in the board

of studies and academic council to refine the curriculum and syllabus.

File Description	Document
Link for additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

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

Response: All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	View Document
Paste web link of Annual reports of Institution	View Document
Link for additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

All the employees of the institution have access to the same rewards, opportunities, and resources irrespective of their gender, including equal pay and benefits for comparable roles with similar responsibilities.

All students are encouraged to assume class leadership responsibilities. Each class has a female and male representative. There is an equal representation of male & female students in the student council and various committees.

The college takes continuous efforts to promote gender equity through curricular, co-curricular, extracurricular activities, and gender sensitization programs.

Curricular Activities

- An open elective course in "Gender Sensitization and Social Impact (OH18006)" has been introduced into the curriculum.
- Without any gender differences, students enthusiastically participate in the annual event "SVCE INNOVATES" which promotes the exhibition of innovative ideas.
- All students are encouraged to apply for an Intramural research Grant for doing their academic projects which are given every year for the best project.

Co-curricular Activities

- Female Students enthusiastically participate in numerous co-curricular activities like Symposia, Conferences, Hackathons, and Sports and Cultural events.
- The Women Empowerment Cell of the college conducts various programs wherein female faculty members and students participate actively.
- International Women's Day is celebrated annually on March 8 to commemorate the social, political, and economic achievements of women.

Safety and Security

- The institution is covered by 24 x 7 security including the girls hostels and also has security personnel posted at strategic points.
- The college has a well-established electronic surveillance system through 559 CCTV cameras covering the majority of locations in the campus.
- The students are advised against indulging in ragging of any form. During the first semester, faculty and staff are assigned anti-ragging duties at vulnerable points.
- Timings for entry and exit into hostels are displayed on the notice boards and the entry points of the hostels. Biometric attendance system is available in the hostels.

- Various helpline numbers are displayed throughout the campus to meet any emergency.
- The "Internal Complaints Committee (ICC) on Sexual Harassment" of the college has been established to guide and help the students.
- A medical officer, a resident nurse, and a 24x7 ambulance service are all available in the college.

Counseling

- There is a faculty advisor for every 20 25 students to counsel the students on issues about academics, co-curricular activities, and psychological & emotional issues of their wards.
- A Female professional counselor is available on campus who counsels the students and staff and motivates them to perform well in all walks of life.
- Faculty counselors (Male and Female) at the institutional level are available to make students feel comfortable while doing their studies.

Other Facilities

- Both boys and girls travel together in the college bus. The transport connects distant locales to facilitate girls, a hassle free commutation to the campus.
- Ladies retiring rooms are provided in many departments.
- ATM facility is provided within the campus which enables easy access to students.

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

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

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

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

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

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

Response:

The green and environmental policies of the college mandate the reduction, reuse, and recycling of the natural resources in the college.

Solid waste management

- There are separate bins to collect bio-degradable and non-degradable waste at strategic locations in the college.
- Paper waste (dailies, assignments, scripts, etc) is periodically collected and given to ITC's Creating Wealth Out of Waste (WOW) Scheme.
- Iron scraps are also reused whenever possible, for example, a pergola was fabricated by civil engineering students, using steel debris and other metallic wastes.

Liquid waste management

• The College has a Sewage Treatment Plant (STP) with a capacity of 250 Kiloliters per Day (KLD) which includes 200 KLD of Ultra-filtration facilities. Around 2 lakh liters of water are recycled every day and the recycled water is being used inside the campus for gardening and flushing toilets.

E-waste management

• E-waste generated in the laboratories is periodically collected and safely disposed off through certified agents.

Waste recycling system

- The tree litters and grass clippings are collected periodically and deposited in two areas ear-marked as compost pits. The compost is collected and used for the upkeep of the College garden and landscape. No chemical fertilizer or pesticide is used.
- Food waste Management: Vegetable Waste is collected and deposited in bio-compost pits to convert them into manure using the Effective Microbes (EM) solution.

Hazardous chemicals and radioactive waste management

• All the chemicals used in the Department of Chemical Engineering are either recovered and recycled or reused. The hazardous chemicals used in the laboratory are neutralized and sent to the sewage treatment plant for the further treatment process.

• The bacterial cultures which are propagated in the laboratories for experimental purposes are discarded after following a suitable decontamination method.

By appreciating the various green initiatives undertaken by the institution to develop an eco-friendly environment, the prestigious Green Campus Recognition Award was given to our college by Tamil Nadu Pollution Control Board.

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

7.1.4 Water conservation facilities available in the Institution:

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

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Link for any additional information	View Document

7.1.5 Green campus initiatives include:

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

Response: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document

7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

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

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certificates of the awards received	View Document
Any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: A. Any 4 or all of the above

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

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

The institution aims at bringing tolerance and harmony among the students and staff by celebrating many National and International days like Teachers' Day, Women's Day, Environmental Day, and Yoga Day.

Cultural, Regional, Linguistic Diversities

- A regional festival such as Pongal is celebrated inside the campus to establish positive interaction among Staff and students who belong to diverse backgrounds.
- Matribhasha Diwas celebrated in the institution serves to highlight the linguistic diversity of the nation.
- The Tamil Mandram of the college celebrates the heritage of Tamil culture.

Communal and Socioeconomic Activities

- As SVCE believes in unity in diversity, Community service and outreach programs are conducted through various clubs which instill a sense of social responsibility. Blood donation camps are conducted every year to help the blood banks for the noble cause.
- Conduct of health camps for the people of rural areas in association with leading hospitals results in provision of medical diagnosis and aid to the underprivileged and rural segments of the society. Health awareness programs including COVID-19 were conducted for the benefit of students and staff.
- Computer systems were donated to the government school in a nearby locality to enhance the learning experience of school children. Basic washroom utensils such as buckets, and mugs were given to improve the hygiene.
- Further, schoolchildren were educated against the usage of plastic items. Our Student sponsored books for the libraries of government schools and an LCD projector was also sponsored for one of the nearby schools.
- Through the PMKVY scheme, youth from neighborhood villages were trained in various job oriented skills and were assisted in getting jobs.
- The college, situated in a semi-urban area amid major industrial belts of Tamil Nadu, shares its expertise by providing training to people from various parts of the neighboring villages to make

them self-sufficient in earning their livelihood.

• The college also provides a good overview and exposure of what engineering studies entail to the school students from all strata of society.

Social Welfare Activities

- Programs such as "SWACHH BHARAT ABHIYAN" are undertaken with much vigor by our students and staff.
- A group of students developed a mobile app named 'E beat' for the beat control of the Tamil Nadu police department.
- The college students have developed an AI-based Autonomous drowning rescue device.
- The college in association with "National Cyber Security and Safety Standards" organized a Workshop on "Cyber Security and Social Media Awareness" for the personnel and family members of CISF.
- The students also served as volunteers during religious occasions of temples in Kanchipuram and nearby districts.

Conservation of Environment

- Events such as planting of tree saplings to enhance the green cover are conducted every year. To assist in the conservation of animal life, the students have developed "House Sparrows" a mobile application to map Sparrows in the northern parts of Chennai.
- The Students have also developed a mobile application named "Turtify" to help in Olive Ridley Turtles conservation.
- The students were appreciated for cleaning the Oil Spill at the Ennore Port due to the collision of two major ships in the year 2017.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

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

Response:

SVCE organizes various activities to sensitize students and employees about their constitutional obligations: values, rights, duties, and responsibilities as citizens. A course titled "Indian Constitution and Society(MC18001)" has been made a mandatory course for UG degree students. The students gain knowledge of the Indian constitution and fundamental rights, functions of the union and state governments in India, the judicial system, and the Election commission of India from this course.

A workshop on "Incorporating Universal Human Values (UHV) in Education" - An AICTE Initiative executed through NCC-IP, AICTE was attended by many faculty members.

Further, courses such as "Professional Ethics(GE18055)" and "Environmental Science & Engineering(GE18251)" highlight to the students the need for a commitment towards ethical practices in their profession and also the importance of improving our environment to prevent further deterioration in the ecosystem due to the climatic changes prevalent till date. Similarly, courses such as "Solid Waste Management(OE18304)" and "Municipal Solid Waste Management(CE18016)" provide an understanding of solid waste classification, collection, transport, processing, and disposal of municipal solid waste. The course on "Water Resources Engineering(CE18030)" enables the students to have an understanding of the basics of surface and groundwater hydrology.

The course on "Human Relations, Values and Ethics(AE18603)" emphasizes the basics of Value Education and the importance of human values towards individual responsibilities and rights and also its impact on global issues.

Various forums in the Institution such as NCC (Army), NCC (Navy), NCC (Air-wing), NSS, RRC, YRC unit, and CARE are actively involved in conducting several events for inculcating values for being responsible citizens.

Constitutional Duties

Independence Day, Republic Day, Sadbhavana Diwas Day, and National Integration Day are celebrated regularly in college. Celebrating the 150th anniversary of Mahatma Gandhi, Citizen Pledge, Rashtriya Ekta Diwas, Kargil Vijay Diwas, Himalayan Diwas, Constitution Day, Anti-corruption Day are all organized. A program regarding the Contribution of Netaji Subhas Chandra Bose in Freedom Fighting was arranged in his fond memory.

Constitutional Responsibilities

Awareness programs on Rain Water Harvesting and Swachh Bharat Abhiyan programs are conducted periodically in the campus. Health camps and tree plantation programs in the neighborhood are organized through the special camps of NSS. Programs on Yoga, Health Awareness (Covid, HIV, first aid, Pulsepolio, Dengue, Cancer, Anti-Tobacco), Environmental Awareness, are organized. The need for a Plastic-free environment has also been emphasized continuously. Awareness programs on Carbon Neutral Pledge are organized to reduce Carbon emissions.

Constitutional Rights & Values

Activities like National Electoral Rolls Purification Programme (NERP), Active citizen, Yuva Sakthi, National Education Policy, National Voters Day, Gender Sensitization, Vigilance Awareness Pledge programs are all organized. Road Safety Awareness Programmes and Blood Donation Camps are conducted periodically. Born to Win and Shine Programme using the concept of Neuro-Linguistic Programme (NLP) to empower the faculty in their teaching career and life was conducted.

File Description	Document
• Details of activities that inculcate values; necessary to render students in to responsible citizens	<u>View Document</u>
Any other relevant information	View Document

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

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

Response: B. 3 of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<u>View Document</u>
Code of ethics policy document	View Document

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

Response:

The college takes pride in commemorating the international and national days that mark the important aspect of historical events to instill a sense of patriotism and promote nationalism among the staff and student community. Important cultural festivals which introduce the rich cultural heritage of our ancient tradition are celebrated with pomp and gaiety.

International Yoga Day(21st June) is observed every year with great dedication.

International Women's Day(8th March) is celebrated every year. To commemorate the cultural, political, and socio-economic achievements of women, various events and competitions are organized.

World Environment Day(5th June) is observed to reemphasize the importance of a good and clean environment.

Republic Day(**26th January**) is celebrated every year with immense patriotic fervor to commemorate the adoption of our Constitution. A plethora of activities like Flag hoisting and March past are organized as a

part of this program.

Flag hoisting ceremonies and March past are conducted to celebrate India's Independence Day(15th August).

Anti-corruption Day(9th December) is observed to highlight and reiterate the importance of a corruption-free society.

National Integration Day(19th November) and Constitution Day(26th November) are celebrated to create awareness about the values and principles enshrined in the constitution

National Voters Day(25th January) is observed with students being advised to strictly exercise their constitutional obligation.

Kargil Vijay Diwas which marks the victory of Indian soldiers in recapturing the mountain heights that were occupied by the Pakistani Army on July 26, 1999, known as the Kargil War is celebrated.

Rashtriya Ekta Diwas(31st October) is observed to mark the birth anniversary of Sardar Vallabhbhai Patel, acknowledging his efforts to unite the country. Mr.Sardar Patel had played a crucial role in the freedom movement of India as well as in its integration into the whole country.

National Youth Day(12th January), the birthday of Swami Vivekananda is celebrated by conducting various events about his noble life and achievements.

Matribhasha Diwas or Mother Language Day(21st February) is celebrated in the institution and serves to highlight the linguistic diversity of the nation.

The Birth Anniversary of Dr. Sarvapalli Radhakrishnan is celebrated as **Teacher's Day(5th September)** every year.

National Mathematics Day (Dr. Srinivasa Ramanujan's birthday) is observed on 22nd December.

Harvest festival '**PONGAL**', a thanksgiving function for a good harvest, a day to honor the cattle involved in agriculture, a day to celebrate and honor the farmers is celebrated with a lot of zeal and enthusiasm on the campus.

Ayudha Puja celebrations are held every year in the college. As part of these celebrations, the festival of Saraswati Puja dedicated to Devi Saraswati, the Goddess of knowledge, wisdom, arts, and education is observed with piety. Also, prayers are offered to all tools, instruments, and vehicles as part of Ayudha Puja.

File Description	Document
Geotagged photographs of some of the events	View Document
Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

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

Response:

PRACTICE 1: DEVELOPMENT OF AN ECO-FRIENDLY ENVIRONMENT

Objectives of the Practice

SVCE believes in Sustainable ecosystem. The College has implemented several sustainable practices to facilitate a culture of preserving the environment and conserving natural resources.

The Context

Well before the UN framing the Sustainable Development Goals (SDGs), SVCE has been nurturing sustainable practices to create a green and clean Campus.

The Practice:

Energy Conservation

The Institution's building architecture has incorporated energy-efficient designs. Especially the new classroom blocks are designed to allow natural light and ventilation. Even the exterior structure needs no coating as it is coated with natural stonework.

All the electrical appliances are with energy stars to guarantee lower energy bills and reduced emissions. Traditional bulbs are also gradually replaced by LEDs. The eco-club periodically conducts awareness programs to educate students, staff, and the local community on how they can lead a sustainable lifestyle. Stickers and posters are placed in several strategic locations like washrooms, and parking lots to remind people to conserve resources like energy and water.

Both Solar Water Heaters and a Solar Power Plant with a 35-kW capacity are installed.

Solid Waste management

Solid waste: Meaningful campus-wide clean-up/reducing/recycling schemes are in place as part of the Swachh Bharat program.

Organic waste like leaf litter is converted to manure and compost and vermin-compost.

Paper waste is periodically collected and given to ITC's Creating Well Being Out of Waste (WOW) scheme.

E- and chemical waste

E-waste is disposed of through authorized agents. Hazardous chemicals are neutralized and sent to the sewage treatment plant for further treatment. The bacterial cultures propagated in the laboratories for experimental purposes are discarded after following an appropriate-decontamination method.

Wastewater management

The College has a Sewage Treatment Plant with a capacity of 250 Kilo Liters per Day (KLD) which includes 200 KLD of Ultra-filtration facility, and the treated water is utilized for the landscape upkeep.

Water Conservation

A 75,00,000-liter rainwater storage collects all the run-off water on the Campus. Besides catering to our internal water requirements, it recharges the aquifers.

A RO plant ensures clean water. Aerator taps are used to reduce the usage of water. Pipes and taps are checked regularly for possible leakages and fixed periodically.

Creating Micro habitats

To promote biodiversity in the campus and its environs several micro-habitats are created on the Campus.

Planting indigenous tree species

As indigenous trees and shrubs are vital for healthy biodiversity, SVCE has nurseries to nurture and propagate native tree species. The saplings are distributed to schools and other institutions. These trees on the campus support 70 species of native and migratory birds.

Butterfly Garden

Two butterfly gardens are a haven for 40 species of butterflies on the Campus.

Herbal Garden

40 different species of herbal plants are nurtured.

Evidence of Success

The campus has a green cover of about 60% and is a sanctuary to a variety of flora and fauna.

SVCE received the Tamil Nadu Pollution Control Board's "Green Campus Award" appreciating the initiatives taken to develop an eco-friendly environment.

Problems Encountered and Resources Required

Since the Campus has 'no ground water' and 'clay soil', creating greenery is a herculean task.

PRACTICE 2: PROMOTION OF A CONDUCIVE ATMOSPHERE FOR RESEARCH AND INNOVATION

Objectives of the Practice

To provide conducive ambience complemented by advanced facilities and appropriate infrastructure to create a sense of curiosity among the students and faculty to explore beyond their academic boundaries and involve in application-oriented research.

The Context

There is an urgent need to promote research and innovation to keep pace with the advancements in thrust areas and contribute solutions to industrial and societal needs.

The Practice

The College has ten research centres approved by the affiliating University, Anna University Chennai. pertaining to various disciplines. In an effort to motivate research and innovation among faculty, the College sponsors faculty members for pursuing research programs. Around 45% of faculty members are Ph.D holders and among them 50% of faculty members are recognized Ph.D supervisors and are guiding 214 research scholars in the institute's centres of research; nearly 100 research scholars completed their Ph. D programme.

Faculty Research Day & Students Research Day are conducted every year which provides a platform for researchers to exhibit their research findings and prototypes.

Financial incentives are awarded to faculty members who publish research papers in international/national journals of repute, undertake funded projects and consultancy work. The Ph.D holders are provided with additional incentives based on their research performance.

Both faculty and students are sponsored to present papers at national/international conferences in India and abroad. They are also encouraged to patent their innovative ideas for which financial assistance is provided by the institution.

Intra-mural funding is provided for both the UG and PG students to support their project work. Stipend is provided for full-time research scholars (JRF/SRF) who join the research centres of the institution.

The College invested in infrastructure worth Rs. 21 lakhs for establishing a center of excellence in Nanotechnology. In continuation to our initial investment, a grant of Rs. 80 lakhs was sanctioned by DST-FIST. Additionally, an amount of Rs. 11 lakhs was received from AICTE. The total cost of the centre is Rs.1.12 crore.

Entrepreneurship Promotion & Incubation Centre (EPIC) actively encourages students and faculty to come up with innovative ideas. Pre-incubation Services is a special initiative by SVCE-EPIC to facilitate students to convert their innovative ideas into functional prototypes by providing financial assistantship and technical/business mentorship.

The Institution Innovation Council (IIC)-SVCE constituted as per the guidance of the Ministry of Education (MoE) Innovation Cell (MIC) creates a culture of innovation in the college.

Evidence of Success

The number of research publications and consultancy projects has increased considerably over the last few years. The number of patents and project proposals submitted is exhibiting an increasing trend. So far 72 patents have been filed of which 40 are published, 18 are under review and 14 are granted.

IIC has earned Five Golden Stars for its performance and activities carried out during the academic year 2019-20. Many of our students have won numerous awards in various events such as Smart India Hackathons. EDII, Government of Tamil Nadu approved 10 innovative ideas submitted by students and faculty.

The Ministry of MSME, DST, and EDII sanctioned funds to the tune of Rs. 25.21 Lakhs through EPIC supporting various proposed ideas of innovation.

Three Ph.D. scholars received a fellowship through the Indian Nano-Electronics Users Program (INUP), Indian Institute of Science, Bangalore, to execute their Ph.D. project. The centre for Nanotechnology has trained 100 UG students, 10 PG students, and 10 Ph.D. Scholars in the field of Nano-Engineering and Nano Science.

Problems Encountered and Resources Required

The faculty members are not able to devote considerable time to research work on account of their academic commitments and administrative responsibilities.

File Description	Document
Best practices in the Institutional web site	View Document
Any other relevant information	View Document

7.3 Institutional Distinctiveness

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

Response:

TOP-NOTCH AND UNQUANTIFIABLE CONTRIBUTION OF SVCE ALUMNI

The institution lays a huge priority on achieving the Program Educational Objectives which describe the career and professional accomplishments that the program is preparing graduates to achieve over a period of couple of years after they pass out of the institution. Accordingly, the students are exposed to various aspects of learning apart from classroom alone, while they are in the campus, to shape them as true

professionals rather than mere graduates of engineering and technology. This distinctiveness of the Institution is reflected in the quality of the alumni base which is on par with any other institution of repute in the country. Indisputably, many of these members of our alumni attribute their present status to the mentoring provided by the SVCE during their formative years as an Engineer or Technologist.

The limited list of SVCE alumni given below is a sample to describe the level of at which the Alumni members have been contributing to the society and by virtue of the same have been duly recognized with distinguished positions at national and global levels. They stand as a testimony to the vision of the institution which commits to transform the learners into global contributors and achievers.

Dr. V. Kamakoti, Director-IIT Madras

Mr. Varun Mammen, Director, MRF Ltd

Mr. Vijay Dalmia, Director, Dalmia Group

Mr. Bala V Sathyanarayana , Chairman, Board of Directors Balmer Lawrie - Van Leer

Mr. Arun Kumar Bhikseshwaran, CTO of Ericcson, North America

Prof. Sathish Gopala Krishnan, University of British Columbia

Prof. Vijay Krishnan Narayanan, Penn State university

Mr. Srinivasan Rajagopalan, Senior Researcher, Mayo Clinic

Ms. Priyadarshini, Jothiraj IAS, District Collector and Magistrate, Arwal, MP

The speciality of SVCE alumni is that, in addition to being successful Engineers and Technologists, they are found to leave their foot prints in all walks of life by being able Administrators like IAS, IFS and IPS Officers, Artists, Politicians, Technocrats, Educationists, Social workers etc. which reflects their ability to exhibit the professionalism gained through their stay in SVCE to the areas of their interest to make their life more meaningful and contented.

To honour the achievers who serve as a role model for the future aspirers, SVCE has instituted two awards. The "Distinguished Alumni Award" is given away to an Alumni member who has made significant achievements in terms of his or her professional career and has been sharing his success with the Alma mater on a continuous basis. This is given away every year during the college day function. The "Alumni Achiever Award" is given to an Alumni member who has done significant contributions to the society and hence recognized well for his or her professional accomplishments in addition to the career advancements and sharing the success with the Alma Mater on a continuous basis. This award is given as and when such notable achievers are identified and the same is handed over during the immediate Graduation Day Ceremony in which the Alumni Achiever is given a place in the Ceremonial Procession accompanying the other dignitaries on the stage. They are expected to give a motivational message to the graduands who are passing out of the institution with a view to emulate the awardee.

SVCE seeks the involvement of its Alumni in all aspects of Governance by considering them prominent positions in all its administrative and academic bodies such as Governing Council, Academic Council and

the Boards of study. It is pertinent to mention that Prof.V.Kamakoti, the Director of IIT, Madras is serving as a member of Governing Council of SVCE. As an advisor for cyber Security at the National level, He has been actively contributing to the development of Programs like Cyber forensics and Information Security.

SVCE Alumni Association (SVCEAA) was formed as early as in the year 1992, which is now a registered body under the Tamilnadu Societies Registration Act. The SVCE logo depicts the collaboration between the Students, College and the Alumni with a tagline of "Together We Can", and true to its motto, the SVCEAA has been doing a lot of activities for the benefit of students in addition to laterally helping the Alumni who need support.

While SVCE recognizes the potential and the importance of its Alumni and has been doing its part to keep them intact by introducing many schemes such as preference in admissions for the wards of the Alumni and incubation in EPIC, the Alumni members also duly reciprocate the gesture to prove that they are not in any way less than their Alma Mater.

The Alumni have instituted many awards to recognize and motivate students who excel in academics. They provide financial assistance to needy students. The first batch of alumni have been sponsoring the tuition fees for four girl students from their Second year to the Final year of study. The recipients of the scholarship are selected based on their economic background and academic performance during their first year of study. The "Budding Bright Engineer Award" was instituted by the SVCE Alumni Association to motivate students in the first year.

Financial support for the development of infrastructure is also done as and when the batches celebrate significant milestones such as their Silver Jubilee year of their passing out of SVCE. The 1991 and 1992 batches made financial contributions towards enhancing the computer facilities at the Digital Library Section in the Central Library during their Silver Jubilee reunion in the college campus. The ICT-based classroom infrastructure was also financially supported by the SVCE Alumni Association.

The most valuable support SVCE gets from its Alumni is in the conduct of various events such as Recruitment, Hackathons, Guest Lectures, Workshops, Mentoring Sessions on Career guidance, Internships, etc.,

SVCE considers the 33 batches of Alumni numbering around 22000 as its brand ambassadors in the true sense, they are always considered as an invaluable asset to the institution. New ways of bringing the alumni across the world is constantly explored and executed. The priority and thrust is always towards that and the success in achieving the same the most distinctive feature that the institution feels proud of.

File Description	Document
Any other relevant information	View Document
Appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information :

Achievements:

- In the year 1996 and1998, the institution pioneered an Undergraduate program in Information Technology and Marine Engineering respectively, which were till then not offered by any of the Engineering institutions affiliated to any technical university. SVCE formulated these programs got approval from the statutory bodies such as AICTE, which is currently adopted by all engineering institutions across the country.
- The campus is ICT enabled campus for enhancing the quality of the Teaching-Learning process to suit the taste of the present generation of students and requirements of the current technology. Autonomous system has enabled the implementation of Digital evaluation in the evaluation process to eliminate the errors associated with valuation and to facilitate more accurate evaluation of OBE parameters.
- Campus wide ERP with eighteen modules is deployed to ensure e-governance in all functional aspects of the institution, from Admission to Graduation, HR Management, Finance and Accounting, Purchase and Stores, Management of Hostel and other services, etc.
- Recognized as one of the most sought-after institutions in the state coming within the first 10 ranks in the state, evident through the rate of filling in of the seats during the Tamil Nadu Engineering admissions.
- The institution boasts of a track record of consistent placement and one of the most sought-after institutions by the students going abroad for higher studies. This is due to its reputation for facilitation of the same through scores of alumni contacts who have done their higher studies abroad and are more than willing to share their experience with their juniors, as a gesture of expressing their gratitude to their alma mater.

Concluding Remarks :

The institution might be fairly old in terms of its existence years but has been shown to be capable of sustaining its glory as a pioneer in education through adoption of modern Teaching Learning Processes and encouraging students and teachers to involve in professional practices thereby producing consistent outcomes conducive to support the Program Educational objectives defined through the Vision of the institution, making it as one of the most sought after private self-financing engineering institutions in the state.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID Sub Questions and Answers before and after DVV Verification 1.1.2 Percentage of Programmes where syllabus revision was carried out during the 1.1.2 Percentage of Programmes where syllabus revision was carried out during the 1.1.2 Percentage of Porgrammes where syllabus revision was carried out during the 1.1.2 Number of all Programmes offered by the institution during the last Answer after DVV Verification : 21 1.1.2.1. How many Programmes were revised out of total number of Progr during the last five years Answer after DVV Verification : 21 Answer after DVV verification : 21 Answer after DVV Verification: 21 Remark : DVV has made the changes as per SSR. I.1.3 1.1.3 Average percentage of courses having focus on employability/ entrepreneursh development offered by the institution during the last five years 1.1.3.1. Number of courses having focus on employability/ entrepreneurshi development year-wise during the last five years Answer before DVV Verification: 2020-21 2019-20 2017-18 2016-17 1154 873 890 864 868 Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17 750 540	ast five years. rammes offered						
1.1.2.1. Number of all Programmes offered by the institution during the last Answer before DVV Verification : 22 Answer after DVV Verification : 21 1.1.2.2. How many Programmes were revised out of total number of Progr during the last five years Answer after DVV Verification : 21 Answer before DVV Verification : 21 Answer after DVV Verification : 21 Remark : DVV has made the changes as per SSR. 1.1.3 Average percentage of courses having focus on employability/ entrepreneursh development offered by the institution during the last five years 1.1.3.1. Number of courses having focus on employability/ entrepreneurshidevelopment year-wise during the last five years Answer before DVV Verification: 2020-21 2019-20 2018-19 2016-17 1154 873 890 864 868 Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17	ast five years. rammes offered						
Answer before DVV Verification : 22 Answer after DVV Verification : 21 1.1.2.2. How many Programmes were revised out of total number of Progr during the last five years Answer before DVV Verification : 21 Answer after DVV Verification : 21 Remark : DVV has made the changes as per SSR. 1.1.3 Average percentage of courses having focus on employability/ entrepreneursh development offered by the institution during the last five years 1.1.3.1. Number of courses having focus on employability/ entrepreneurshidevelopment year-wise during the last five years Answer before DVV Verification: 2020-21 2019-20 2017-18 2016-17 1154 873 890 864 868 Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17	rammes offered ship/ skill						
development offered by the institution during the last five years1.1.3.1. Number of courses having focus on employability/ entrepreneurshi development year-wise during the last five yearsAnswer before DVV Verification:2020-212019-202018-192017-182016-171154873890864868Answer After DVV Verification :2020-212019-202018-192017-182016-171154873890864868	-						
development offered by the institution during the last five years1.1.3.1. Number of courses having focus on employability/ entrepreneurshi development year-wise during the last five years Answer before DVV Verification:2020-212019-202018-192017-182016-171154873890864868Answer After DVV Verification :2020-212019-202018-192017-182016-171154873890864868	-						
1.1.3.1. Number of courses having focus on employability/ entrepreneurshi development year-wise during the last five years Answer before DVV Verification: 2020-21 2019-20 2018-19 2017-18 2016-17 1154 873 890 864 868 Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17 1154 873 890 864 868	ıip/ skill						
development year-wise during the last five years Answer before DVV Verification: 2020-21 2019-20 2018-19 2017-18 2016-17 1154 873 890 864 868 Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17 Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17	nip/ skill						
development year-wise during the last five years Answer before DVV Verification: 2020-21 2019-20 2018-19 2017-18 2016-17 1154 873 890 864 868 Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17 Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17	•						
Answer before DVV Verification: 2020-21 2019-20 2018-19 2017-18 2016-17 1154 873 890 864 868 Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17							
1154 873 890 864 868 Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17							
Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17							
Answer After DVV Verification : 2020-21 2019-20 2018-19 2017-18 2016-17							
2020-21 2019-20 2018-19 2017-18 2016-17							
2020-21 2019-20 2018-19 2017-18 2016-17							
750 540 530 560 650							
Remark : DVV has made the changes as per not considered those courses whor employability/ entrepreneurship/ skill development.	om not focus on						
1.3.4 Percentage of students undertaking field projects/ internships / student projects/	oats (Data for th						
latest completed academic year)	ects (Data for th						
	latest completed academic year)						
	1.3.4.1. Number of students undertaking field projects / internships / student projects						
	Answer before DVV Verification : 3043						
Answer after DVV Verification: 2905	Answer after DVV Verification: 2905						
Remark : DVV has excluded duplicate students.	Remark · DVV has excluded duplicate students						
-							
2.1.1 Average Enrolment percentage (Average of last five years)							
2.1.1.1. Number of students admitted year-wise during last five years							

2020-21	2019-20	2018-19	2017-18	2016-17
910	858	1031	1087	1196

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
910	858	1031	1087	1198

2.1.1.2. Number of sanctioned seats year wise during last five years Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1266	1233	1233	1251	1251

Answer After DVV Verification :

2020-21	2019-20	2018-19	2017-18	2016-17
1266	1233	1233	1251	1251

Remark : DVV has made the changes as per report shared by HEI.

3.1.3 **Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years**

3.1.3.1. The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
4	2	1	7	0

Answer After DVV Verification :

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

Remark : DVV has made the changes as per shared award letters by HEI.

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.

3.3.2.1. Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.

Answer before DVV Verification:

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

		230	94	67	60	43
				· c• ,•		,
		Answer At 2020-21	Eter DVV Vo 2019-20	2018-19	2017-18	2016-17
		178	85	56	54	39
		178	83	30	34	39
	not co	onsidered Fl	V has not co DP program cellectual Pr	s and those	workshop/S	Seminar whe
3		ber of resea ive years	arch papers	s per teach	ers in the J	ournals not
	3.4 years		per of resear			ls notified o
		Answer be 2020-21	fore DVV V 2019-20	2018-19	2017-18	2016-17
		245	140	143	123	210
		Answer Af	ter DVV V	erification :	>	
		2020-21	2019-20	2018-19	2017-18	2016-17
		2020-21 187	2019-20 95	2018-19 85	2017-18 87	2016-17 112
4	Num	187 emark : DV ber of book		85 verify the I	87 SSN numbe	112 r from UGC
4	Num five y 3.4	187 emark : DV ber of book years 4.4.1. Total tional/ inte	95 V has cross	85 verify the Is ters in edit books and onference I	87 SSN numbe ed volumes chapters in proceedings	112 r from UGC s / books pu n edited vol
4	Num five y 3.4	187 emark : DV ber of book years 4.4.1. Total tional/ inte	95 V has cross and chap number of rnational co	85 verify the Is ters in edit books and onference I	87 SSN numbe ed volumes chapters in proceedings	112 r from UGC s / books pu n edited vol
4	Num five y 3.4	187 emark : DV ber of book years 4.4.1. Total tional/ inter Answer be	95 V has cross and chap number of rnational co fore DVV V	85 verify the Is ters in edit books and onference Is /erification	87 SSN numbe ed volumes chapters in proceedings	112 r from UGC s / books pu n edited vol s year-wise
4	Num five y 3.4	187 emark : DV ber of book years 4.4.1. Total tional/ inter Answer be 2020-21 47	95 V has cross as and chap number of rnational co fore DVV V 2019-20	85 verify the Is ters in edit books and onference p /erification: 2018-19 18	87 SSN number ed volumes chapters in proceedings 2017-18 16	112 r from UGC s / books pu n edited vol s year-wise 2016-17
4	Num five y 3.4	187 emark : DV ber of book years 4.4.1. Total tional/ inter Answer be 2020-21 47	95 V has cross and chap number of rnational co fore DVV V 2019-20 24	85 verify the Is ters in edit books and onference p /erification: 2018-19 18	87 SSN number ed volumes chapters in proceedings 2017-18 16	112 r from UGC s / books pu n edited vol s year-wise 2016-17

75.3357

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs). 3.5.2.1. Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs) Answer before DVV Verification: 2020-21 2019-20 2018-19 2017-18 2016-17

Answer After DVV Verification :

84.63995 | 33.39013 | 26.25535 | 35.4935

2020-21	2019-20	2018-19	2017-18	2016-17
62.63995	21.39013	26.25535	24.4935	75.3357

Remark : DVV has not considered Training of teachers other than the consultancy/ corporate training.

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

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
2	4	4	5	4

Answer After DVV Verification :

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

Remark : DVV has not considered certificate of appreciation.

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

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
20	41	32	21	17

Answer After DVV Verification :

	5	9	7	11	12		
	Remark : DV ush - Internati			• • •			
	y2019 Sadbhu	•		•	of Yoga Teac	ers day celet	oration Bloo
car	np phase-I Blo	od donation	n camp phas	se-II.			
	erage percen a last five year	0	ents partic	cipating in (extension act	vities listed a	at 3.6.3 abov
	3.6.4.1. Total ar-wise durin	g the last fiv	ve years.		g in extension	activities lis	sted at 3.6.3
		efore DVV V			2016 17		
	2020-21	2019-20	2018-19	2017-18	2016-17		
	2740	3645	3409	2213	987		
	Answer At	fter DVV Ve	erification ·				
	2020-21	2019-20	2018-19	2017-18	2016-17		
	2576	1572	1932	1939	709		
Jul	ush - Internati y2019 Sadbhu np phase-I Blo	ivana Day-2	019 Interna	tional Day		-	
Nu	mber of Coll ernship/ on –		-	•	research/ facu	lty exchange	e/ student ex
int	3.7.1.1. Total	number of	Collabora ip/ on –the	tive activit -job trainir	es per year f g/ project w		faculty excl
		fore DVV V	ciffication				
		2019-20	2018-19	2017-18	2016-17		
	Answer be			2017-18 1012	2016-17 493		
	Answer be 2020-21 958	2019-20 513	2018-19 742	1012			
	Answer be 2020-21 958	2019-20	2018-19 742	1012			
	Answer be 2020-21 958 Answer At	2019-20 513 fter DVV Ve	2018-19 742 erification :	1012	493		

4.3.4	Instit	ution has t	he followin	g Facilities	for e-conte	ent develop	ment
	23	. Lecture	ntre sual centre Capturing S quipments	•		ling	
		Answer Af	fore DVV V ter DVV V V has select	erification:	B. 3 of the a	above	port by HEI.
5.2.1	Avera	age percent	tage of plac	ement of o	utgoing stu	dents duri	ng the last five years
			ber of outg e fore DVV V			ear - wise o	luring the last five years.
		2020-21	2019-20	2018-19	2017-18	2016-17	
		592	650	608	623	645	
		Answer Af	ter DVV V	erification :			-
		2020-21	2019-20	2018-19	2017-18	2016-17	
		294	312	318	350	324	
	Re	mark : DV	V has not co	onsidered tra	aining letter	and offer l	etter without signed.
5.3.1	activi	ties at inte		y/state/nati	onal / inter	•	performance in sports/cultural vel (award for a team event should
	cultur	ral activitie should be		niversity / one) year ·	state / nati · wise durin	onal / inter	utstanding performance in sports / mational events (award for a team ïve years.
		2020-21	2019-20	2018-19	2017-18	2016-17	
		6	25	15	14	15	
		Answer Af	ter DVV V	erification :			-
		2020-21	2019-20	2018-19	2017-18	2016-17	
		6	25	15	14	13]
	Re						nd Runner's up Position.

5.3.3	Avera year	ge number	r of sports :	and cultura	al events / c	ompetition	organised by the institution per	,
	- wise	during the	e last five y			/ competitio	ns organised by the institution y	ear
		2020-21	2019-20	2018-19	2017-18	2016-17		
		9	16	16	15	14		
		Answer Af	ter DVV Vo	erification :				
		2020-21	2019-20	2018-19	2017-18	2016-17		
		5	11	12	11	10		
6.3.4	Birthd	ay celebrat	ion competi	ition – Ther	ndral Tamiz	h Mandram	y Celebrations Vivekanander Teachers Day ace Faculty Development	
	Orient 6.3. Orient Progra	tation / Ind .4.1. Total tation Prog ammes yea	duction Pro number of gramme, R ar wise dur	ogrammes, ' teachers a	Refresher attending p ourse, Show e years	Course, Sh rofessional	evelopment Programmes, ort Term Course). development Programmes, viz., urse, Faculty Development	
		2020-21	2019-20	2018-19	2017-18	2016-17		
		201	136	122	122	93		
		Answer Af	ter DVV Vo	erification :				
		2020-21	2019-20	2018-19	2017-18	2016-17		
		198	122	118	112	81		
	Rer	nark : DVV	√ has exclue	ded duplica	te teachers.			
7.1.10	other : 1. 2. 3.	staff and c The Code There is a Institutio administi	onducts pe e of Conduc a committe n organizes rators and	riodic prog ct is display e to monito s profession other staff	grammes in yed on the or adherence nal ethics p	this regard website to the Co rogrammes	s, teachers, administrators and de of Conduct for students, teachers, are organized	

Answer before DVV Verification : A. All of the above
Answer After DVV Verification: B. 3 of the above
Remark : DVV has select B. 3 of the above as per shared report of SL no. 1,2 and 3 by HEI.

2.Extended Profile Deviations

	Extended (Questions			
	Number o	f programs	offered yea	r-wise for la	ast five yea
	ſ	fore DVV V			
	2020-21	2019-20	2018-19	2017-18	2016-17
	19	20	20	20	20
	Answer At	fter DVV Ve	erification:		
	2020-21	2019-20	2018-19	2017-18	2016-17
	21	20	20	20	20
	21	-0			
	21				
		f full time to	eachers yea	r-wise durir	ng the last
	Number o	f full time to		r-wise durir	ng the last
	Number o			r-wise durir	ng the last
	Number o	f full time to		r-wise durin 2017-18	ng the last
	Number o	f full time to	erification:		
2	Number o Answer be 2020-21	f full time to fore DVV V 2019-20	Zerification: 2018-19	2017-18	2016-17
2	Number o Answer be 2020-21 293	f full time to fore DVV V 2019-20	Verification: 2018-19 300	2017-18	2016-17
2	Number o Answer be 2020-21 293	f full time to fore DVV V 2019-20 262	Verification: 2018-19 300	2017-18	2016-17
2	Number o Answer be 2020-21 293 Answer Af	f full time to fore DVV V 2019-20 262 fter DVV Ve	Verification: 2018-19 300 erification:	2017-18 316	2016-17 316