

FOR 2nd CYCLE OF ACCREDITATION

SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

SREE SAINATH NAGAR, A. RANGAMPET, CHANDRAGIRI MANDAL, CHITTOOR DISTRICT 517102 www.svec.education

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Genesis of the Institution:

Sree Vidyanikethan Engineering College (SVEC), approved by AICTE, New Delhi, recognized by Government of Andhra Pradesh and affiliated to JNTUA, Ananthapuramu, was established in the year 1996 with the twin objectives of providing quality Technical education and values. The Institution with competent teaching fraternity, quality students and proactive Management has carved a niche for itself in the field of Technical Education. The Vision of the Management to become a premier Educational Institution in the country has laid a roadmap for itself, to achieve excellence in teaching and research. Today SVEC offers programs approved by AICTE with an annual intake of 1902 for the AY 2021-22.

Core values:

Excellence: Commitment to continuous improvement and innovation in Teaching, Learning, research and extension

Ethics: Pledge to honesty, integrity, mutual respect, transparency and accountability

Diversity: Respect to all aspects of diversity

Student First: Student centric planning and development

Collaboration: Stakeholder partnership for holistic institutional development and synergistic growth

Vision

'To be one of the Nations' premier Engineering Colleges by achieving the highest order of excellence in Teaching and Research'

Mission

- To foster intellectual curiosity, pursuit and dissemination of knowledge.
- To explore students' potential through academic freedom and integrity.
- To promote technical mastery and nurture skilled professionals to face competition in the ever increasing complex world.

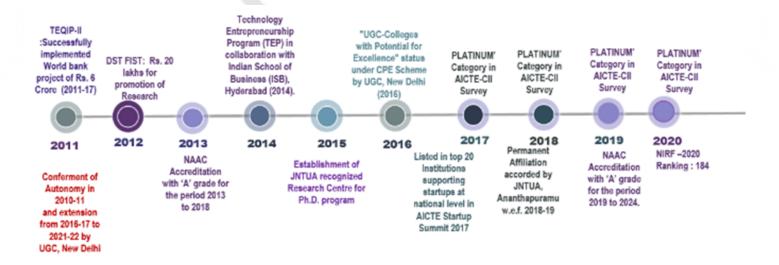
1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

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Institutional Milestones hitherto:

- Conferment of Autonomy in 2010-11 and it's extension from 2016-17 to 2021-22 by UGC, New Delhi
- "UGC-Colleges with Potential for Excellence" status under CPE Scheme by UGC, New Delhi (2016)
- NIRF –2020 Ranking: 184
- NBA accreditation of all 7 eligible UG programs
- NAAC Accreditation with 'A' grade for the period 2013 to 2018 & 2019 to 2024.
- Permanent Affiliation accorded by JNTUA, Ananthapuramu w.e.f. 2018-19
- Recognized as 'A' Grade Institution by the Department of Higher Education, Andhra Pradesh
- 'PLATINUM' Category in AICTE-CII Survey 2017, 2018, 2019, 2020
- TEQIP-II: Successfully implemented World bank project of Rs. 6 crore(2011-17)
- National MEMS Design Centre (Zonal Centre) under NPMASS in collaboration with IITB, Mumbai and IISc, Bangalore.
- JNTUA recognized Research Centres: EEE, ECE & CSE Departments
- Contemporary curriculum
- Implementing AICTE *Margadarshan* scheme
- EDC: Technology Entrepreneurship Program (TEP) in collaboration with Indian School of Business (ISB), Hyderabad (2014).
- Listed in top 20 Institutions supporting startups at national level in AICTE Startup Summit 2017
- Confederation of Indian Industry (CII) for enhanced Industry Interaction
- Andhra Pradesh State Skill Development Corporation (APSSDC) for enhancing employability skills
- Established SIEMENS T-SDIs for Skill Development
- Hosting CMs Skill Excellence Centre for skill development
- Dassault Systems 3-D Experience Centre in collaboration with APSSDC for Skill Development
- Industry Linkages for Student Internships and Placements
- Vibrant Training activities and Student Placements
- Linkages with Corporate Bodies for Student and Faculty Development



Institutional Strengths:

- Visionary Management with transparency and decentralization of academic administration.
- Linkages with Leading Academic Institutions/Bodies for Student and Faculty Development
- Aesthetic Green Sprawling Campus for Congenial Learning Environment
- Safe and Secure Campus

- Highly qualified and well experienced faculty
- Intake of quality students.
- Technical Associations and chapters of students to provide a platform for enhancement of knowledge in latest areas of engineering technology.
- State of the art infrastructure to cater to the needs of students and faculty
- Established linkages with neighboring Universities and reputed industries including Multinational companies for knowledge sharing and transfer.
- Automation of College administration with an ERP package NIVA

Institutional Weakness

- Consultancy at a nascent stage.
- Lack of Industry sponsored/supported laboratories
- Low entrepreneurial acumen among students owing to their rural background.
- Locational disadvantage

Institutional Opportunity

- Offer new demand-driven UG programs in emerging areas.
- Attract and recruit more faculty from outside the state.
- Enhance interaction with higher Technical Educational Institutions like IITs and national laboratories in Chennai and Bengaluru for knowledge sharing, invite adjunct faculty, and indulge injoint research & consultancy activities for better student placements.
- Augment internal revenue generation by offering more certification courses and corporate training.
- To become a degree awarding institution as per the NEP 2020

Institutional Challenge

- Due to jobs in industry with UG qualification, enrolment for M.Tech and Ph.D is rather low. Emergence of new universities and entry of Foreign Institutions affecting the availability of quality faculty for recruitment and students for admissions.
- Fast changing technology and emergence of new specializations in Engineering & Technology leading to the requirement of continuous skill upgradation of faculty.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The institution in its endeavors to better the quality of engineering education has put in sincere efforts in articulating program objectives, programs outcomes and program specific outcomes to clearly lay emphasis on student learning outcomes and further progress. The curriculum content is made contemporary to meet the needs of the industry and research in accordance to the professional societies and premiere national and international institutions. Curriculum reflects latest trends in higher education in Engineering and Technology with a blend of core and electives that has scope for employment and research in frontier areas to meet the

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global challenges and demands. Industry-relevant electives are offered to students to ensure their employability. Courses on professional ethics, intellectual property rights and environmental sciences are offered to promote value education and social responsibility. Senior faculty of the Institution interacts with their peers and experts from Institutions of National repute, to assess and plan for the upgradation of curriculum content, it's contemporary relevance and impact.

There is provision for core subjects, elective options, supportive and allied courses which provide academic flexibility and enrich professional awareness among students.

Feedback from students, alumni, employers, experts visiting the Department and faculty forms the basis for curriculum development and revision. Consolidated inputs from various stakeholders form the basis for updating the syllabus in tune with the goals and objectives of the institution and cutting edge development in the field of engineering and technology.

Teaching-learning and Evaluation

Teaching-Learning process helps students and teachers to acquire skills that empower them. The learning environment at the institute motivates the students in the development of personal skills and competencies. Realizing the advancements in technology and need for implementing innovative teaching methods, faculty are encouraged to attend various Faculty Development Programs which add value to their technical expertise and teaching methodologies. To have smooth conduct of class work, faculty prepares lesson plans, module-wise course contents for all the subjects handled by them. Syllabus coverage is reviewed by HODs by verifying lesson plan, lesson diary and attendance register of the faculty. The institution also conducts remedial classes, reinforcement classes, Add-on courses, bridge courses, Skill Development programs in emerging areas, Workshops, Guest Lectures, Expert Lectures, soft skill and communication skill development programs, Placement Training, and such others for the holistic development of students.

Institution gives priority for the academic welfare of the students through the mentor-mentee system by assigning twenty students to each teacher. The mentor maintains profiles of the students all through their course for constantly and continuously monitoring their progress. Students are encouraged to participate in co-curricular activities through the Departmental Technical Associations.

The Management encourages the faculty to improve their qualifications and teaching skills by providing financial assistance, study leave and by deputing them for faculty development programs.

The Institution follows external and internal assessment of students of both UG and PG programs. The year/semester-end answer scripts are evaluated by external examiners.

Students' performance is assessed by using direct and indirect assessment methods for the attainment of course outcomes, program outcomes and program specific outcomes by analyzing the semester-wise students' performance and feedback from stakeholders. The institution strictly follows all the examination reforms and timelines as set by the affiliating University.

Research, Innovations and Extension

To further excellence and the ecosystem for research and innovation, the institution has adopted key strategies.

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It has been promoting multidisciplinary research by constituting research clusters, nominating the students, faculty, and research scholars as members. A research advisory cell of eminent external experts from Institutions like IITs, IISc, national laboratories, and Industry is guiding the Institution in its research endeavours.

Recruiting teachers with potential and drive for research, establishing research centres, formation of research clusters, exploring consultancy opportunities, sustained interaction with industry, and incentivizing faculty for research endeavours has given the much-needed impetus for the research outcomes in the form of quality publications and external funding.

The Institution has adequate infrastructure like a state of the art library, laboratories, and internet facilities to undertake research activities. Laboratories are with the latest and sophisticated instruments which are used for research activities. The Library has a large collection of books and journals for supporting research. Computing facilities with the internet are made available for students and faculty for supplementing the research activity.

The Innovation cell strives to create a vibrant innovation ecosystem on the campus and provides a forum for scouting ideation and Pre-incubation of prototypes.

An Entrepreneurship Development Cell is established to create an entrepreneurial ecosystem which provides a forum for students to translate an idea into a fundable technology business. Incubation support has been offered to the students and alumni who are interested to start their own ventures on campus.

An industry Institute Interaction cell has been constituted to bridge the gap between industry and academia. Various industry-led activities and MoUs have been helping the students to make them industry-ready.

For the holistic development of students Departmental associations and NSS Unit are established which motivate the students towards community development and infuse a sense of social responsibility. Various activities that are being conducted help the students to understand the problems faced by the society and enable them to find solutions. Students and faculty are actively involved in community development and awareness programs.

Infrastructure and Learning Resources

The institution has established the best infrastructure to facilitate student learning outcomes, employability, faculty and student research outcomes. Modern infrastructure peripherals have been added and laboratories are made available as per requirements. Classrooms are equipped with ICT facilities, Air-conditioned Computer Labs, Seminar Hall, Skill Development Centres, Research Labs, Conference Halls, Auditorium, Library, Cafeteria, Common rooms for boys and girls, Reprographic centre, Recreational spaces, Safe drinking water facilities etc. Other amenities such as Hostel facilities for boys and girls, dispensary, canteen, waiting halls for boys and girls, placement and training centre, playgrounds, communication facilities, transport, uninterrupted electricity and mineral water supply facilitate comfortable college life.

The Library is divided into sections: Reference Hall, Stack Halls, Digital Library, Reading Hall, Departmental Library, and Periodical cum CD Section for accessing e-resources, Reception, Circulation Counter. Based on the recommendations received from the faculty and students, the Library Committee takes decision for the purchase and use of current titles, journals, E-journals and other reading material. The library services are fully computerized as the routine work of Issue and Return of books is being done online with the help of software.

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Online Public Access Catalogue (OPAC) terminals are available in the library. Students and faculty can also access Internet facilities and other online subscriptions provided in the library at any time between 8:00 AM to 8:00 PM. The library has remote access to e-publications through, J-GATE, ISME, ISCE, IEEE, & DELNET.

State of art computing facilities are available at the institution. Around 2200 computers with internet facility are presently available to the students and faculty. Dedicated Lease-line of 2 GBPS bandwidth with Wi-Fi networking caters to all the Labs and departments, to the faculty and students of the college.

Regular maintenance and upkeep of the infrastructure facilities and equipment is done through AMCs (Annual Maintenance Contract) and by in-house staff and technicians. Outside experts are hired as and when required. For upkeep and maintenance, the service of an electrician, a plumber and other technicians are available in the Institution round the clock.

Student Support and Progression

The institution has well defined and transparent systems / mechanisms such as scholarships, counselling, training and placement, ED Cell, IPR Cell, Student Associations, Professional Society Chapters, Skill Development Centres to support the students for holistic development and also redressal of issues for superior campus life at SVEC.

Scholarships are also provided by the management of SVEC to the deserving and needy students through a robust procedure.

The Institution has a mentor-mentee system where each faculty member is allotted 20 students whose academic progression is monitored and the slow learners are counselled to improve upon their performance and advanced learners are rightly guided for career advancement through Training and Placement (TAP) Cell. The diverse interests of students is noted, properly guided by the mentors. The Mentors involve themselves in counselling activities twice in a semester or as often as required. In addition to the Mentor-Mentee system, the college has the Counselling Cell to understand and resolve the problems of the students struggling with academic stress, anxiety, depression, social addictions (if any), through YOURDOST, a professional counselling organization.

TAP Cell of the College provides excellent facilities to groom the students in terms of technical, communication, interpersonal and intrapersonal skills for campus placements. Invited/Guest talks by experts from Industry are organized to motivate the students or placements and career advancement. TAP cell organizes pre-placement training, and placement activities both on-campus and off-campus for the students. TAP cell also organizes training for students appearing for competitive exams. In addition to the TAP cell, each department has a Student's association encouraging the students to hone their potentials through extra and co-curricular activities for capacity/leadership development and skills enhancement. Students are also motivated, guided and placement opportunities are provided by the Alumni of the college through Alumni Association. Many students of the Institution are pursuing higher studies in India and abroad. Several students have secured coveted jobs both in India and abroad.

The institution has Anti-Ragging Committee, Anti-sexual Harassment Committee/Internal Complaints Committee, Grievance Redressal Cell, Women Empowerment Cell, Sports and Cultural Committee in which students are also represented. Student representation ensures utmost satisfaction of students.

Governance, Leadership and Management

The Vision, Mission and quality policy of the Institution are in tune with the objectives and policies of Higher Education in India. The Institution follows a participatory governance model where in delegation and decentralization of authority to competent functionaries and committees is made for effective and efficient management, enhance stakeholder engagement and satisfaction.

The Institution has a perspective strategic plan for its development. The future requirements of infrastructure, human resources, finance are envisaged at the meetings of the Governing Body, which formulates the action plan. Regular meetings of all the stakeholders are held, recorded and the resolutions are placed before the Governing Body for perusal. The Governing Body meets periodically to discuss on planning and execution of various academic and administrative activities. The other statutory bodies also meet and discuss the implementation of these solutions passed.

The Management, Principal, Deans and Heads of Departments constantly interact and motivate members of faculty, administrative and supporting staff on issues relating to academic progress, administrative transparency and quality measures that are being implemented in the Institution. The Principal, Deans, HODs and faculty members are actively involved in executing the action plans and policies for fulfilment of the Vision and Mission of the institution. Various committees have been constituted with senior faculty members as conveners in the college and entrusted with the responsibility of implementing the programs and policies and ensure these committees function effectively for achieving the goals of the institution. Internal Quality Assurance Cell (IQAC) plays a crucial role in implementation of institution's quality plans. Academic and Administrative units work incoordination, to achieve quality.

Institutional Values and Best Practices

The institute undertakes a good number of gender equity promotion programs and respects the dignity of women in all aspects through Women Empowerment Cell. Personal Counselling Room, Common Room and 24 x 7 CCTV Surveillance are available in the Campus for the Safety and Security of Women and other inmates.

Waste Management is evident and effective in the institution. Twin dustbins are provided at prominent places in the campus for solid waste collection. Liquid Waste Management is highly effective and efficient in the campus. Groundwater is purified by two well-maintained RO Systems for potable use. Wastewater is treated through sewage treatment Plants of 150 and 200 KLD and it is used for gardening the lawns on campus. Chemicals in the laboratories are disposed as per Material Safety Data Sheet (MSDS).

Sustainable rain water harvesting is evident by the presence of soak pits, trench pits, ponds and sumps for collection along with well-designed conveyance and storage system.

Green Practices viz. Automation of Academic and Administrative Practices, Vehicle Pooling, Electric Cars, 40% Green Landscaping with Trees And Plants, Solar Power Plant of Capacity 500 KVA, Lighting through LED Bulbs, Weather Monitoring Station, Paperless Office, Plastic Free Campus, Posters on Awareness on Energy and Water Conservation, Outreach Activities are clearly evident. Significant number of UG Projects were carried out Environment and Sustainability.

Ample facilities for differently abled students (Divyangjans) are visible in the form of ramps at different places, lifts, wheel chairs and battery operated electric vehicles.

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Efficient renewable energy sources are in place with 75% of power requirement through solar energy and 20% of lighting through LED bulbs. Special events like Republic Day, Independence Day, International Women's Day, Engineer's Day, Teacher's Day, National Science Day, National Technology Day, Graduation Day, and Distinguished Lecturers by eminent personalities are organized in a grand manner.

The institutional distinctiveness is apparent in fostering green ambient campus and provision of modern infrastructure with smart classrooms, state-of-the-art central library, SIEMEMS labs, auditorium, seminar halls, research centers, hostels, sports facilities, swimming pools, and gymnasium which are maintained meticulously.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College		
Name	SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)	
Address	Sree Sainath Nagar, A. Rangampet, Chandragiri Mandal, Chittoor District	
City	Tirupati	
State	Andhra Pradesh	
Pin	517102	
Website	www.svec.education	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	B. M. Satish	0877-3066777	9160999961	0877-306699 9	svecp@vidyaniket han.edu
IQAC / CIQA coordinator	P. Giridhara Reddy	0877-3066901	9845773437	0877-223671 7	directorra@vidyani kethan.edu

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of Establishment, Prior to the Grant of	22-11-1996

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'Autonomy'	
Date of grant of 'Autonomy' to the College by UGC	02-06-2010

University to which the college is affiliated				
State	University name	Document		
Andhra Pradesh	Jawaharlal Nehru Technological University, Anantpur	View Document		

Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC	14-07-2008	View Document		
12B of UGC	29-11-2011	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	15-06-2020	12	
AICTE	View Document	15-06-2020	12	
AICTE	View Document	15-06-2020	12	
AICTE	View Document	15-06-2020	12	
AICTE	View Document	15-06-2020	12	
AICTE	View Document	15-06-2020	12	
AICTE	View Document	15-06-2020	12	
AICTE	View Document	15-06-2020	12	
AICTE	View Document	15-06-2020	12	
AICTE	View Document	15-06-2020	12	
AICTE	View Document	15-06-2020	12	
AICTE	View Document	15-06-2020	12	

Recognitions		
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	Yes	
If yes, date of recognition?	30-08-2016	
Is the College recognized for its performance by any other governmental agency?	Yes	
If yes, name of the agency	National Board of Accreditation	
Date of recognition	28-05-2020	

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Sree Sainath Nagar, A. Rangampet, Chandragiri Mandal, Chittoor District	Rural	30.4	52815

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)							
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted	
UG	BTech,Civil Engineering	48	As per guidelines Specified by APSCHE	English	120	110	
UG	BTech,Electr ical And Electronics Engineering	48	As per Guidelines Specified by APSCHE	English	210	177	
UG	BTech,Mech anical Engineering	48	As per Guidelines Specified by APSCHE	English	180	142	
UG	BTech,Electr onics And C	48	As per Guidelines	English	240	240	

	ommunicatio n Engineering		Specified by APSCHE			
UG	BTech,Comp uter Science And Engineering	48	As per Guidelines Specified by APSCHE	English	240	240
UG	BTech,Comp uter Science And Engineering	48	As per Guidelines specified by APSCHE	English	60	60
UG	BTech,Comp uter Science And Engineering	48	As per Guidelines Specified by APSCHE	English	60	60
UG	BTech,Comp uter Science And Engineering	48	As per Guidelines Specified by APSCHE	English	60	60
UG	BTech,Electr onics And In strumentatio n Engineering	48	As per Guidelines Specified by APSCHE	English	60	49
UG	BTech,Information Technology	48	As per Guidelines Specified by APSCHE	English	120	120
UG	BTech,Comp uter Science And Systems Engineering	48	As per Guidelines Specified by APSCHE	English	120	120
PG	Mtech,Electr ical And Electronics Engineering	24	As per Guidelines Specified by APSCHE	English	18	0
PG	Mtech,Electr ical And Electronics Engineering	24	As per Guidelines Specified by APSCHE	English	18	0
PG	Mtech,Electr	24	As per	English	24	1

	onics And C ommunicatio n Engineering		Guidelines Specified by APSCHE			
PG	Mtech,Comp uter Science And Engineering	24	As per Guidelines Specified by APSCHE	English	36	3
PG	MCA,Master Of Computer Applications	36	As per Guidelines Specified by APSCHE	English	60	60
Doctoral (Ph.D)	PhD or DPhi l,Electrical And Electronics Engineering	36	Relevant PG Programs	English	1	0
Doctoral (Ph.D)	PhD or DPhi l,Electronics And Commu nication Engineering	36	Relevant PG Programs	English	1	0
Doctoral (Ph.D)	PhD or DPhi l,Computer Science And Engineering	36	Relevant PG Program	English	1	0

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor			Asso	Associate Professor			Assis	Assistant Professor		
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				35				42	J			305
Recruited	29	6	0	35	33	9	0	42	209	96	0	305
Yet to Recruit				0		1		0				0

	Non-Teaching Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government		7,		0				
Recruited	0	0	0	0				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				110				
Recruited	94	16	0	110				
Yet to Recruit				0				

	Technical Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				0				
Recruited	0	0	0	0				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				145				
Recruited	137	8	0	145				
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	0	0	0	0	0	0	0	0	0	0
Ph.D.	29	6	0	29	9	0	36	9	0	118
M.Phil.	0	0	0	0	0	0	2	0	0	2
PG	0	0	0	4	0	0	171	87	0	262

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	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	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

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

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	3	0	0	3		

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	861	7	0	30	898
	Female	544	2	0	2	548
	Others	0	0	0	0	0
PG	Male	42	0	0	0	42
	Female	27	0	0	0	27
	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

Provide the Following Details of Students admitted to the College During the last four Academic Years **Programme** Year 1 Year 2 Year 3 Year 4 SCMale Female Others STMale Female Others OBC Male Female Others General Male Female Others Others Male Female Others Total

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Civil Engineering	<u>View Document</u>
Computer Science And Engineering	View Document
Computer Science And Systems Engineering	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Electronics And Instrumentation Engineering	View Document
Information Technology	View Document
Master Of Computer Applications	View Document
Mechanical Engineering	View Document

Institutional preparedness for NEP

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The Institutions is adequately equipped with infrastructure for multidisciplinary/interdisciplinary focus on curriculum development/modifications. As an 'Autonomous' Institution, Sree Vidyanikethan Engineering College is offering 'electives' wide range of multidisciplinary subjects. With the participation of all stakeholders, the Institution shall introduce further multidisciplinary subjects. The students shall be encouraged to take-up multidisciplinary approach in learning, creative thinking, critical analysis at every stage of the program. Science, Technology, Engineering and Mathematics (STEM) approach in curriculum shall be further strengthened. Efforts shall be sustained to become a 'multidisciplinary institution in the year to come. Teaching-learning shall be further strengthened to promote multidisciplinary/interdisciplinary education practices. Focus shall be further signified towards imbibing best practices in 'multidisciplinary' approach. Adding experimental learning part and skill-oriented learning part in undergraduate curriculum as employability and entrepreneurship enhancement strategy shall be further intensified. The proposal of offering additional two to three compulsory papers with 'multidisciplinary' content shall be considered for implementation with immediate effect. Progressive efforts shall be made to

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converting single-stream academic programs to multidisciplinary programs. The students shall be endorsed with selection of subjects of their choice based on their requirement that promised them with employability. Entrepreneurship education and training shall be intensified as a co-curricular activity. There shall be bridge courses and value added courses to support multidisciplinary/interdisciplinary education. The 'Minors' shall be further considered to improve the scope of 'multidisciplinary/interdisciplinary. Flexible curricular structure shall be developed through 'curricular revisions' to enable creative combinations of subjects that lead to 'multidisciplinary'/'interdisciplinary' programs both at UG and PG levels. The students are encouraged to take-up multidisciplinary 'real-world' problems to carry out their project works.

2. Academic bank of credits (ABC):

An 'Academic Bank of Credit' (ABC) that stores credit gained by the student 'digitally' shall be initiated in consultation with the 'statutory bodies'. The institutions shall make necessary arrangement and amendments in the academic system. There shall be a dedicated system to promote effective management of 'Academic Bank of Credits'. Efforts shall be made to recognize, transfer and redemption of credits gained by the students appropriately. Since the 'ABC' promotes academic credit banking, transfer and redemption within the MEE framework, it is expected to integrate multiple disciplines/programs/courses of higher learning. In the framework of Multiple Entry & Exit in to the programs, ABC shall be made to endorses significant autonomy to the students in providing choices of the courses in the selected program of study and course options across many higher education disciplines and HEIs. Efforts shall be made towards identification of 'Credits' requirement to award certificates, diplomas and degrees. There shall be a system to help the students to track the 'credit' earning progressively. Being aware that the Higher education institutions having Grade A from the National Assessment and Accreditation Council (NAAC) or the top 100 institutions in the National Institutional Ranking Framework (NIRF) or institutions with a minimum score of 675 from the National Board of Accreditation (NBA) for at least three programmes

shall be eligible for registration in the ABC, efforts shall be channelized to promote the institution. As per the guidelines of HECI, credits, and transcripts shall be recognized by the Institution as a part of the consortium on the ABC. Efforts shall be made to allow the students from commerce stream to take up courses in sciences, wherever applicable, with the help of bridge courses. Since the ABC helps in integrating skills into a choice-based credit system by providing wide-ranging options for choosing courses from several institutions, the institution shall make necessary arrangement to support the same. The Institution shall adhere to the guidelines of University Grants Commission -Establishment and Operation of Academic Bank of Credits in Higher Education-Regulations, 2021 in this regard. The Institution shall recognize the following in consultation with the statutory bodies • Courses undergone by the students through the online modes through National Schemes like SWAYAM, NPTEL, V-Lab etc. or of any specified university • Credits obtained by students by undergoing Skill-courses from Registered Higher Education Institutions offering vocational Degree or Diploma or Post Graduate Diploma or Certificate programmes.

3. Skill development:

To address the skills mismatch, the Institution shall take up initiatives as envisaged in NEP-2020 towards skill development for the students. The Institution shall strengthen the curriculum with adequate skill development content. Being aware that the two major reason of skill shortage are faculty and facility, the institution shall strengthen both. Wherever deemed, the faculty shall be encouraged to take up initiatives like 'Tran the Trainer' along with STTPs. This facilitate the institution to use the facility potential of the institution to be utilized maximum for skill development. The institution shall tie-up with State and Central government initiatives to promote skill development. Some of the initiatives include, Ministry of Skill Development & Entrepreneurship (MSDE); Pradhan Mantri Kaushal Vikas Yojana (PMKVY); Skill India; SANKALP; National Skill Development Mission; and other state initiatives like APSSDC. The Institution shall offer training, skilling, up-skilling and re-skilling for the students on rolls and neighboring students/unemployed youth. There shall be regular training and skilling activities

organized for the benefit of the students. A skilldevelopment programs/activities calendar shall be floated to provide the information on skill development activities to the students. Laboratory experiments shall be strengthened to promote skill acquiring by the students. The Institution shall make necessary arrangement to provide skill development for college drop-outs and unemployed youth through short term courses that fetch employment to them. The Institution shall procure training infrastructure for the selected areas to provide skill development for the students. In consultation with the statutory bodies, the institution shall offer certificate/diploma program through skill development infrastructure of the Institution. The institution shall apply for 'fund' to prospective funding agencies to support skill development at the Institution. In collaboration with industry, the institution shall organize skill development program and related activates that benefit the students.

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

Encouraging this sort of skill in languages will only ever benefit the student. But, more importantly, it is because India is a land of diverse cultures and languages. The institution offers students an opportunity to learn foreign languages. However, in view of the NEP-2020 envision on teaching-learning in the Indian languages, the institution shall float an environment where students can engage in teachinglearning in their mother tongue. Since these efforts shall endorse the students with 'self-esteem', there shall be initiations to teach the part of the course in the local languages. Learning resources shall be developed to support the same. However, the importance of communication in 'English' shall not be discouraged because of the nature of working environment for the engineering graduate demanding the same. The teaching-learning in local language shall be considered as an opportunity to curtail 'dropouts' from early stages of the program duration. Languages like Hindi, Sanskrit and other local languages shall be taught on need basis to promote 'Unity in diversity'. The ability to express the views, ideas, thoughts, opinions, etc., by the student shall be addressed with a mix of English and local languages. There shall be certificate programs offered by the institution on 'local languages'. The novel approach of 'multidisciplinary-multilingual' shall be adopted

wherever deemed fit. It is our responsibility to preserve these cultures& languages and learn them as best as we can, and the institution shall put the efforts in this direction. Through the policy envision, it is a way of learning that combines several disciplines and fields of study and provides a broad-based education that solve local and global problems 5. Focus on Outcome based education (OBE): One of the most profound benefits of OBE is the sense of clarity it fosters. Students, along with their parents, can pick an institution, program and course based on clearly spelled out learning objectives. The Course Outcome (CO), Program Outcome (PO), Program Specific Outcome (PSO) and Program Educational Objective (PEO) determine exactly what students are expected to accomplish, post their course or program respectively. This clarity is further reflected in the quality of teaching and delivery, across divisions and departments, where faculty may adjust their focus more appropriately. The next advantage, and perhaps the most obvious one, is flexibility. OBE empowers students to choose what they would like to study and how they would like to study it. Not only does it adapt to a learner's strengths and weaknesses, but it also provides sufficient time to attain proficiency and fluency in the subject matter. Additionally, the model allows the learner to transfer their credits and switch to another institution that is accredited with the OBE syllabus. Institutions are recognized, benchmarked, and can be easily compared with one another based on this accreditation. As you can see, every stakeholder benefits from the OBE framework. National Education Policy-2020 addresses all the above said advantages of OBE. The multiple entry & exit system, establishment of 'Academic bank of Credits', emphasis on learning outcomes, online & digital learning as envisaged in the policy shall promote true OBE in higher education. OBE works well with vocational education streams like engineering and sciences Vis a vie the arts. The latter includes subjects such as literature and philosophy that require a more free-flowing structure. The institution shall further intensify the OBE and shall imbibe best practices on par with the premier institutions in implementation 6. Distance education/online education: Sensing the need for the distance education and online education, the institution shall float modules

that can be offered in distance mode/online mode. Study Webs of Active Learning for Young Aspiring Minds (SWAYAM), Digital Infrastructure for Knowledge Sharing (DIKSHA), will be long-drawnout to provide teachers with a structured, userfriendly, rich set of assistive online tools for monitoring the progress of student learning. Learning management systems shall be made mandatory for all the faculty to promote online education. Required digital infrastructure shall be updated to support digital learning. Appropriate existing e-learning platforms will be strengthened and content creation, digital repository, and dissemination shall be encouraged in academic practices. A digital repository of content including the creation of coursework, Learning Games & Simulations, Augmented Reality and Virtual Reality will be developed for the benefit of the students. Use of Virtual Labs are encouraged. Existing e-learning platforms such as DIKSHA and SWAYAM will also be made available to the students to have equal access to quality practical and hands-on experimentbased learning experiences.

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

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

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

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	
5908	5756	5813	5890	5883	

F	File Description		Docun	nent	
I	nstitutional data ir	n prescribed format	View 1	<u>Document</u>	

2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
1473	1499	1554	1552	1465

File Description	Document
Institutional data in prescribed format	View Document

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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
5874	5678	5735	5828	5798

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

2.4

Number of revaluation applications year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
172	170	198	247	837

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
463	423	458	458	426

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
398	403	372	467	448

File Description	Document
Institutional data in prescribed format	View Document

3.3

Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
398	403	372	467	448

File Description	Document
Institutional data in prescribed format	View Document

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
902	923	899	836	794

File Description	Document
Institutional data in prescribed format	<u>View 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
585	588	588	588	582

File Description	Document
Institutional data in prescribed format	View Document

4.3

Total number of classrooms and seminar halls

Response: 97

Total number of computers in the campus for academic purpose

Response: 1963

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4.4

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
1827.57	2722.36	1567.69	1472.67	1409.13



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:

The Institution has ensured a systematic procedure for the design, implementation and revision of the curriculum, based on the three tenants of deliverables - Knowledge, Skills and Attitude, and utilising the autonomy that the college has earned. The Primary objective of the college is to nurture High Quality Engineering Professionals to meet the global needs.

Factors for Curriculum Design:

The Curriculum is thoughtfully designed to ensure that the students gain not only the required domain knowledge but also the appropriate skills and attitudes for being globally competitive and workforce-ready. The Curriculum is designed taking the best of the following resources:

- Curriculum of various reputed Universities
- Model curriculum as prescribed by the AICTE
- Expectations of the parents, aspirations of the students & alumni and demand from the industry

Implementation of Outcome Based Education (OBE):

- The initial phase: To ensure academic rigour and quality, the design of the curriculum, category of courses, number and choice of electives, and curricular structure are well planned.
- The next phase: For every course, the Course Outcomes (COs) is mapped with the Program Outcomes (POs) and the Program Specific Outcomes (PSOs) of the program, as directed by the statutory body. The well-defined rubrics of Bloom's taxonomy are adhered to for courses related to Practicals, Seminars, and Project work which are in turn mapped to COs.
- An effective implementation of this OBE methodology has ensured that the graduating engineers acquire all the 12 POs as defined by NBA, to be competitive on global platform, with desired graduate attributes. Specific to every program, SVEC has designed 3-5 PEOs that are measured through the performance of the alumni.

The Institution meticulously regularly monitors the attainments of COs, POs and PSOs of all the programs and appropriate actions are taken based on the identified weaknesses, through a well-structured Continuous and Comprehensive Evaluation mechanism, for ushering need-based improvement.

Process of Curriculum Design:

The draft of the curriculum is prepared by having the above design criteria, through inputs/discussions with all stakeholders. This is then discussed in the Departmental Development Committee (DDC) and is put

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forth to the respective Boards of Studies where, in addition to senior faculty members, experts from industry, external academic experts and Alumni discuss and finalize the curricula. This curriculum is then placed to the Academic Council and Governing Body for perusal, suggestions and approval. The finally evolved curriculum is printed as the SVEC syllabus manual and disseminated among various stakeholders, as also hoisted on the institutional website.

The academic autonomy of the Institution has provided the opportunity to revise the curriculum at regular intervals, based on the needs and suggestions from various stakeholders. In last five years the curriculum of the UG & PG programs have been revised in 2016, 2019 and 2020.

Undergoing MOOCS is made mandatory for the students to upgrade their knowledge, to the global requirements. Further, Internship is made compulsory for all the students.

In addition to the above value added courses are conducted to ensure our graduates are industry ready and relevant.

File Description	Document
Any 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: 16

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

Response: 16

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

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Response: 100

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
463	423	458	458	426

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	<u>View Document</u>
Any additional information	View Document
Link for Additional Information	View 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: 59.13

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

Response: 1260

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

Response: 2131

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document
Link for 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: 100

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

Response: 16

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

In order to integrate the cross cutting issues relevant to Gender, Environment & Sustainability, Human Values and Professional Ethics, SVEC has imbibed relevant courses into the curriculum. Apart from enhancing professional competencies these aim to inculcate general competencies viz., social values, human values, environment sensitivity and such others, thereby leading to a holistic development of students.

The courses on Ethics, Human Values, Human Resources & Organizational Behaviour, Environmental Studies are embedded in the curriculum of all UG programmes. Apart from this, community outreach through NSS activities are encouraged.

1. Gender Sensitivity

Gender sensitivity and gender sensitization is accomplished by including boys and girls equally in all the committees of the Institution. There are many platforms for hands-on experiences related to gender sensitivity which enable students to interface with real life situations such as field work, community outreach, and gender sensitization activities organised under the Women cell.

The Women cell was constituted and has been formally functioning since 2010. The cell regularly organizes programs on women empowerment and aims to enable lady faculty and girl students to explore their latent potential in all aspects, providing a congenial working environment for them.

Events such as Quiz, Miss-Ethnic, Role-Play and Elocution Competitions on Women Empowerment and

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Great Women Personalities are conducted. Programmes on Gender Sensitization & Social Responsibility, Gender Equality through Digitalization, Women Protection and equality are also conducted.

Around 20 programmes like "Awareness on Sexual Harassment at Work Place", "Laws related to Women", "Cervical Cancer Awareness", "An Orientation on Behaviour and Discipline of Girl Students", "Violence against women-Safeguards-awareness of women laws" were conducted in last five years.

2. Human Values and Professional Ethics

A course related to human values "Professional Ethics and Human Values" is offered as an open elective to all the UG students to pursue at least once during their programme of study. Various Social development activities like working in NGOs, organizing blood donation camps, health check-up camps, hygiene and health workshops, environment awareness camps, lake cleanliness drive, workshops on social issues, public health, gender issues and such others are regularly conducted. All the activities are monitored by faculty/NSS coordinator in-charge.

As an integral part of student engagement in social activities the college also mandates that all students enrol as NSS Volunteers. It aims at inculcating values, ethics and socially-responsible qualities. Students organize street plays, debates, awareness campaigns, and Health check-up camps.

3. Environment studies

A course on Environmental Science is included in all UG programmes. In order to sensitize students about the environment and sustainability issues, a number of activities such as seminars, workshops, guest lectures, industry visits and field excursions were organized for students of all programmes. Environment Day, Earth Day, World Water Day are celebrated every year, where students actively participate. Workshops and seminars on various aspects of environment sustainability are also organized periodically.

List of courses introduced by SVEC to integrate cross cutting issues is uploaded for reference.

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	

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

Response: 76

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

2020-21	2019-20	2018-19	2017-18	2016-17
10	17	17	16	16

File Description	Document
List of value added courses (Data Template)	View Document
Brochure or any other document relating to value added courses	View Document
Link for Additional Information	View Document

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

Response: 31.85

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
613	2439	1612	930	3705

File Description	Document	
List of students enrolled	View Document	
Any additional information	View Document	
Link for Additional Information	View Document	

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

Response: 25.15

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

Response: 1486

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
Link for 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

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 85.14

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

2020-21	2019-20	2018-19	2017-18	2016-17
1515	1370	1303	1354	1384

2.1.1.2 Number of sanctioned seats year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1626	1632	1632	1632	1614

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: 87.31

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
525	511	506	504	513

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

2.2 Catering to Student Diversity

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

Response:

SVEC has a robust mechanism for continuous monitoring and evaluation of the students. The students are from different domicile status and scholastic abilities. Based on the performance of the students in diagnostic tests, Formative tests, & Continuous Internal Evaluation and performance in the classes, the students are categorized as advanced and slow learners at the beginning of the class work. This helps to reach out to both the categories of students to learn at their own pace and become competitive.

Special Programmes for advanced learners: Advanced learners are identified based on the academic performance, interaction in the theory and laboratory classes. These advanced learners are encouraged to become members of Professional bodies, to take up mini projects for inculcating a research culture, to participate/organize inter-collegiate technical association activities.

Students are encouraged to take up internships at reputed organizations and also to enrol and learn through MOOC programs offered by premiere institutions. They are motivated to participate in Workshops, SDPs, Paper presentations and others. In-house competitions such as Technical quiz, Debate, Group discussion, Problem solving and decision making under Technical associations are conducted. Campus recruitment training is provided. They are also encouraged to participate in Spoken Tutorials offered by IIT, Bombay.

Special Programmes for slow learners: SVEC takes special care of slow learners. Mentors monitor academic performance and interact frequently to understand the issues that affect their ability to learn or impede their academic success. The institution has a robust system to regularly communicate the performance and attendance of the students to parents. Departments conduct remedial classes; provide course material to slow learners as well as for those who are on the verge of dropping out due to arrear subjects. These students are given reinforcement classes in order to improve their performance in the supplementary semester end examinations. The Faculty members also revise the topics as requested by the students, provide question bank and also train in answering the questions to score good marks.

English Language Learning classes through Pearson Me-Pro platform are provided for the benefit of students hailing from vernacular medium and also those whose proficiency in English is weak. Personality Development programs are conducted for students who have good technical skills but unable to express their knowledge.

Strategies adopted for student improvement: Departments organize remedial classes to clarify the doubts of the students, provide course contents, question bank and solutions for the difficult numerical problems. Faculty members teach content beyond the syllabus after the completion of the syllabus to enrich the knowledge of the students in the advanced topics. Additional laboratory experiments are also

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conducted after the completion of the regular laboratory classes. The institution has signed MoUs with many organizations by which students are benefitted with expert lectures from industry experts and also to undertake industrial visits. Students are encouraged to attend industrial visits also. To bridge the knowledge gap of the students, various Add-on/Value added courses are regularly conducted by the departments. In-plant training is also provided to the students to fill their knowledge gap

File Description	Document	
Any additional information	View Document	

2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)		
Response: 15:1		
File Description Document		
Any 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:

Sree Vidyanikethan Engineering College follows various student centric methods to enhance Teaching-Learning. Few important methods among them are: Lectures, class presentations, Tutorials, Laboratory experiments, written assignments, case studies etc., Apart from these, departments conduct a number of activities like seminars, debates on current issues, group discussions and quizzes through Technical Associations and Professional bodies. These activities develop the stage courage, expression skills, thinking abilities, organizational skills, leadership qualities etc., among students. Student's enthusiasm, involvement and willingness to participate makes the teaching-learning process more student-centric.

Other student-centric experiential and participatory learning methods practiced by the institution are:

- 1. Application of modern analytical techniques which are not covered in the course curriculum are also carried out in the final year project work in order to develop interest among the students towards research and seek to go for higher studies.
- 2. Students who are interested in Research & Development work are motivated and encouraged to present their work in National/International conferences/workshops and publish in Journals of repute.
- 3. Students are rewarded for their outstanding performance in the projects, experiments, research and other relevant fields.
- 4. Students also undertake an internship during their pre-final and final year in different organizations where they are exposed to real world issues and problems and policy making process.
- 5. Students are also taken for industrial visits, assigned mini projects, made to participate in training

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- programs in order to develop the communication and presentation skills.
- 6. Faculty is engaged with their research work in association with potential students and they always try to share their innovative ideas with the students.
- 7. Student-centric learning is also provided in the practical sessions.
- 8. Experiential learning is ensured through group projects. To enhance the practical knowledge and innovative approach, students are encouraged to carryout mini projects in lab courses.
- 9. Competitive and team spirits are developed through group discussions, debates and panel discussions.

File Description	Document
Any additional information	View Document

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

Response:

At SVEC all the faculty members are encouraged to adopt innovative teaching methods to ensure effective learning outcomes. Use of simulation software in classroom teaching to explain difficult concepts which are hard to visualize is one approach practiced in many departments. The ICT facilities and other learning resources are adequately available in the institution for academic and administrative purposes. The staff and students have access to technology and information retrieval on current and relevant issues. The institution deploys ICTs for a range of activities. The digital classroom with new technology makes the learner/teacher tech savvy while using all modern teaching aids like LCD projectors, audio video system etc. Faculty members use working models, charts, PPTs, videos, and animations to present the important/difficult theoretical concepts. Faculty also uploads videos, PPTs, tutorials; assignments lecture notes and other relevant materials through LMS (Learning Management System). Faculty members share the learning material which can be accessed by student groups at their leisure. The Institute subscribes to various online resources like IEEE, Digital Library and DELNET. Faculty members are encouraged to use the above online resources along with NPTEL videos for a better teaching-learning environment. Use of smart classrooms with web-based teaching facilities by teachers to illustrate the concept clearly through audio/video mode helps the students to understand better. SVEC encourages faculty to participate in technical and other training programs which help them to adopt new and innovative approaches such as, Flipped Class room, Blended Learning and Think Pair Share to incorporate in the teaching plan, to make learning more effective and interesting. Various faculty competency domains are created at department level where senior faculty members guide junior faculty members to improve their teaching content/delivery methods. They also share their experience of teaching a particular course. The institution also takes special efforts to take faculty members for outbound training programmes for training them on best teaching practices adopted by senior and performing faculty. Realizing the importance of imparting quality technical education, the institution also organizes in-house training programs to hone teaching and mentoring skills.

Course Delivery Methods:

Think Pair Share

- Flipped Class room
- Blended Learning
- Learning Management Systems
- Video Lectures
- Lab experimental works
- Simulation models
- E-learning Resources for self-learning

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	View Document

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

Response: 17:1

2.3.3.1 Number of mentors

Response: 345

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:

Sree Vidyanikethan Engineering College, being an Autonomous institution, follows the guidelines notified by Jawaharlal Nehru Technological University Ananthapur while preparing the Academic Calendar. The College prepares the Academic calendar at two levels i.e. one at Institution level and the other at the department level. At the institution level IQAC in coordination with Dean (Academics) prepares Academic Calendar for all UG and PG programs at the beginning of every academic semester which includes start and end dates of first and second spell of instructions, First and Second midterm CIE exam dates, Commencement of semester end examinations (Theory and Laboratory) and commencement of next semester.

Based on the Academic Calendar of the institution, each departmental head prepares the Academic calendar following the guidelines specified in the institution's Academic calendar, a copy of which is provided to all the staff and students of their department at the beginning of the academic year/semester. The department Academic Calendar includes all the events like guest lectures, expert lectures, Value Added courses, Industrial visits, seminars/conferences planned etc., apart from the dates of reopening; orientation program, commencement of internal exams, commencement of semester end examinations, important functions in the college etc., The action plan for academic oriented activities like seminars/workshops/conferences to be organized, subject experts to be invited for guest lectures, cultural programs for various activities, schedule of final year project reviews are decided in the respective departments and submitted to the Principal before the commencement of the academic semester. The evaluation of the action plan is reviewed/ verified by Internal Academic and Administrative Audit committee at the end of every academic semester.

Teaching Plans are prepared by the entire faculty for the theory subjects allotted by the concerned HODs. The teaching plans consist of topics that are planned to cover during each hour of class being engaged for the entire semester. Two Continuous Internal/midterm Examinations are conducted strictly as per the academic calendar. First and Second Internal/midterm answer sheets are given to students after valuation for verification. Within one week of completion of midterm exam, the mentors inform parents about the performance of the student in midterm examinations and attendance status through post/mail. Parent-Teacher meeting is also conducted once in a year by the departments.

File Description	Document
Upload Academic Calendar and Teaching plans for five years	View Document
Link for Additional Information	View Document

2.4 Teacher Profile and Quality

Response: 100 File Description Year wise full time teachers and sanctioned posts for 5 years(Data Template) List of the faculty members authenticated by the Head of HEI View Document View Document

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

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: 31.14

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
131	146	132	130	104

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	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: 6.67

2.4.3.1 Total experience of full-time teachers

Response: 2653

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

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: 16.79

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
10.76	15.17	14.50	20.52	22.99

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File Description	Document
Institutional data in prescribed format (Data Template)	<u>View Document</u>
Any additional information	View Document
Link for Additional Information	View 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: 4.85

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
172	170	198	247	618

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Any 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:

The institution adopts robust systems for evaluation of students through internal and external assessments. The concept of IT interventions in evaluation system has provided much needed agility, accountability and transparency. SVEC is using NIVA software for the entire examination process.

Process of Integrating IT

- An indigenous examination system is a built-in module in NIVA ERP. All activities of the examination section are integrated into NIVA ERP to keep track of the students' data from the day of their registration till graduation. It facilitates online storage and retrieval of the data.
- Using the registration details, seating plans and Hall-tickets generation, posting of attendance and malpractice details, entry of encoding details of answer books, Marks consolidation, Reports generation for Results publication, Marks Cards, Provisional Pass Certificates and Consolidated Grade Sheets generation are undertaken through NIVA ERP.

Electronic Generation of Examination Papers (EGEP)

- The concept of Electronic Generation of Examination Papers (EGEP) has been designed and is being implemented from 2010 by eliminating human involvement in selection of Question papers. This has given confidence among stakeholders about the robustness in the examination system.
- Question bank for each subject will be prepared by collecting few sets of question papers from the external subject experts and checked and verified by other experts, to enable random generation and as far as possible, error-free question papers.
- For each subject, three sets of question papers are generated just one hour before the commencement of the examination, out of which, one set of question paper will be randomly selected and made photocopies to distribute to the students in the examination halls just five minutes before the commencement of the examination.

Examination Procedure:

The Examination and Evaluation procedures are incorporated in the regulations & syllabus books provided to the students and also in the college website.

- The examination procedure is systematically organized with a specific set of activities, viz., issuing notifications and time-tables; student registrations for examinations; conducting examinations; evaluation, announcement of results; revaluation and issue of marks cards.
- These activities are intimated through convenient media (SMS, email, notice boards).
- Eligible students are enlisted in the nominal rolls and are allowed to take midterm and semester-end examinations for any components of courses through the process of registration.
- Students register for the semester-end examinations online using login-based NIVA ERP.
- As per the academic regulations, weightage is given to the performance in midterm exams and semester-end performance for all the courses.
- Seating plans for examination are prepared using NIVA ERP andmembers of faculty from departments are assigned for invigilation duties
- Based on the recommendations of the Boards of Studies, the Principal appoints external examiners to set the question papers in the concerned subjects.
- Answer books of the students are encoded (to maintain confidentiality/secrecy) and sent for external valuation.
- Examination system has automation package, to process the student marks, publish results and prepare necessary marks cards.
- The assessment of student performance is evaluated on a continuous basis through:
- 1.Internal/midterm Assessment: Student performance is evaluated by conducting two mid-term examinations, namely Mid-I and Mid-II.
- 2. Semester end Examination: Student performance is evaluated by conducting semester-end examinations and getting the answer scripts evaluated by external faculty.

Continuous internal assessment system

The courses like Theory, Practical, Seminar, Project and Viva-Voce are made part of the curriculum. All the theory and practical courses of a program are evaluated throughout the program of study by conducting midterm tests and semester end examinations.

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Theory Course: Each theory course is assessed for 100 marks with a weightage of 30% for continuous internal assessment and 70% for semester-end examination for UG courses. For PG courses 40% internal assessment and 60% semester-end examination.

Internal/midterm examinations comprise of 2 tests of two hour duration. The two examinations of continuous internal assessment are conducted centrally by the College on the dates mentioned in the academic calendar. Two mid-term examinations each for 30 marks are to be conducted. For a total of 30 marks, 80% of better one of the two and 20% of the other one are added and finalized.

Laboratory course: Each Laboratory subject is assessed for 100 marks with a weightage of 50% for continuous internal assessment and 50% for semester-end examination for both UG & PG courses.

Internal/midterm examinations comprise of 2 tests each of 20 marks with two hour duration, continuous day to day evaluation and for record 30 marks, totalling to 50. The two examinations are conducted by the College on the dates mentioned in the academic calendar. For a total of 50 marks 80% of better one of the two and 20% of the other one are added and finalized.

Seminars: The evaluation of external assessment examinations of the seminars is based on the performance of the student for the work assigned by the guide and evaluated in the departmental committee and guide.

Project work: The evaluation of continuous internal assessment examinations of the project work are based on progress of the student in the work assigned by the project supervisor, periodically evaluated by the supervisor together with the departmental committee constituted for this purpose.

File Description	Document
Any additional information	<u>View Document</u>
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:

The details of Program Outcomes, Program Specific Outcomes and Course Outcomes for all the programs and the mechanism of communication followed by SVEC are:

- 1. Program Outcomes (POs) as given by the NBA is displayed in prominent places in all the departments and also in the web-site.
- 2. Program Specific Outcomes (PSOs) are written for each program after thorough discussion & deliberations with stakeholders. The PSOs are also displayed in the prominent places in all the

respective departments and also in the web-site.

- 3. Course Outcomes (Cos) are written for each course in every program after discussion amongst the course handling faculty & subject experts. The COs are kept in the course file & uploaded in the respective department website with syllabus. As the COs form the bases for achieving the POs/PSOs and Mission and Vision of the Institute, a brief description on writing a CO, CO-PO mapping is given below:
 - Course handling faculty defines the course outcomes using Revised Blooms Taxonomy and discusses with the subject expert.
 - The IQAC reviews the Course Outcomes. The COs are agreed upon by the faculty of the program and should drive towards the POs and PSOs.
 - Each Course Outcome is mapped to Program Outcome in terms of relevance. Three levels of relevance based on degree of correlation are used. The levels of correlation are: 1 for low, 2 for medium and 3 for high correlation.
- 4. The contribution of course to each PO is expressed in terms of average relevance of COs mapped to that particular PO. Similarly the value computed for all the courses including first year courses shall be entered for the corresponding PO and PSOs.
- 5. Awareness about POs/PSOs & COs is made known to students by faculty at the beginning of the semester besides displaying them in the respective departments, course files, and hand out materials and in the college website.
- 6. Course Outcomes are communicated to students through Internal/midterm Assessment question papers.

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 process of attainment of COs, POs and PSOs starts from writing appropriate COs for each course of the program from first year to fourth year in a four-year engineering degree program. The Course Outcomes are written by the respective faculty member using action verbs of learning levels suggested by Revised Bloom's Taxonomy. Then, a correlation is established between COs and POs in the scale of 1 to 3, 1 being the slight (low), 2 being moderate (medium) and 3 being substantial (high). A mapping matrix is prepared in this regard for every course in the program including the elective subjects. The written course outcomes and their mapping with POs are reviewed by BOS Chairperson before they are finalized.

In the Outcome Based Education (OBE), assessment is done through one or more than one processes, carried out by the institution that identify, collect and prepare data to evaluate the achievement/attainment of Course Outcomes (COs). Assessment tools are categorized in two methods, to assess the Course Outcomes (COs). They are: 1. Direct Assessment Methods and 2. Indirect Assessment Methods.

Direct Assessment Methods:

- 1. Two Internal/midterm Assessment Tests
- 2. Day- to- Day Lab evaluations
- 3. Tutorials and Assignments
- 4. Project work for final year students
- 5. Seminar for third year students
- 6. Mini Projects
- 7. Semester-End Examination

Target levels or Rubrics for attainment of Course Outcomes (COs) are set by the Department Academic Committee. After the course is delivered and examination results are announced, actual attainment of COs are determined through Faculty Course Assessment Reports (FCARs). If the attainment is not reached the target, then the course coordinator will submit the action plan to attain the target level in the forthcoming year. The BoS chairperson and HOD continuously monitor to ensure the attainment targets for all the courses in the department. If the attainment is reached for a course then the target level is increased for the next offering of the course or by planning suitable improvements in the teaching-learning process, to increase the actual attainment, so as to reach the desired target.

File Description	Document
Any additional information	View Document

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

Response: 99.93

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

Response: 1469

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

Institution.

Response: 1470

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	<u>View Document</u>
Link for the annual report	View Document

2.7 Student Satisfaction Survey

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2.7.1 Online student satisfaction survey regarding teaching learning process		
Response: 3.97		
File Description Document		
Upload database of all currently enrolled students View Document		

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:

Recognizing the significance of research, SVEC has been providing the required facilities to promote the research culture on campus. The institution has been promoting Multidisciplinary research by constituting the Special interest Groups or research clusters, nominating the students, faculty, and research scholars as members. The institution has established twelve research centres in the areas of MEMS, Renewable energy, Data Analytics, Micromachining, Geotechnical Engineering, Cyber security, Signal processing, VLSI & Embedded systems, Water and Environmental Engineering and intelligent computing. With the support of the management, government, and a few industry collaborations. All the members in the research clusters have been publishing articles in peer-reviewed journals which are indexed in quality databases.

The institution has recognized research centres in three Departments ECE, EEE, and CSE to offer full-time Ph.D. through the affiliated university. The number of faculty recognized as Ph.D. guides compared to previous assessment period by various universities has been increased for this assessment period.

The number of articles published in quality journals has been increasing year by year. The approach in publishing research articles has been changed over the years by preferring the databases such as Scopus and Web of science. Plagiarism has been taken care of while publishing articles and proposals. Licensed plagiarism software has been purchased to assist the students, faculty, and research scholars in this regard. Students and faculty are encouraged to attend reputed conferences to present their research findings. A good number of research proposals for funding have been submitted in recent years. The institution is committed to supporting a few proposals by providing an internal seed fund. Research mentors have been appointed who have been continuously interacting with the faculty who are pursuing research activities.

Faculty have been encouraged by providing incentives for their progress in research activities. The number of patents filed has been increasing year by year. A dedicated facility called the Intellectual property rights cell (IPR Cell) has been established to look after these activities. A well-defined Research and IPR policy has been designed to promote the research activities on campus. It has been hoisted on the institutional website for the quick reference of relevant stakeholders.

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

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

Response: 3.53

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
6.5	10.6	0	0.1	0.45

File Description	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	View Document
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: 0.19

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
0	2	0	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,

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endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 595.81

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
478.90	28.00	30.23	52.82	5.86

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: 1.53

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
13	5	5	8	1

File Description	Document
Names of teachers having research projects	View Document

3.2.3 Percentage of teachers recognised as research guides

Response: 12.31

3.2.3.1 Number of teachers recognized as research guides

Response: 49

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

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

Response: 36

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

2020-21	2019-20	2018-19	2017-18	2016-17
6	3	3	5	1

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	<u>View Document</u>
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:

SVEC has created an ecosystem for innovation & incubation, research, Entrepreneurship, and community orientation, by providing the infrastructure, mentoring network, seed support, and shared resources.

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An Innovation Cell was established in the college to foster the culture of innovation among faculty and the students. The Cell aims to encourage, inspire, and nurture young students by innovation with new ideas and transform them into prototypes. Institution Innovation Council (IIC) has been established at SVEC by the MHRD Innovation Cell (MIC), Ministry of HRD, Govt. of India, to foster the culture of Innovation among Higher Education Institutions. SVEC Institution innovation council has been recognized as one of the Best Performing Institutions from the South-Central Zone (SCRO) for the Year 2018-19 by MHRD's Innovation Cell.

An Entrepreneurship Development Cell has been started in the college during the year 2002. The Cell aims at creating an entrepreneurial ecosystem in the campus and provides a forum for students to translate an idea into a fundable technology business. Alumni entrepreneurs have been visiting the institute to motivate the students by sharing their experience which creates more impact among the students. These activities have resulted in achieving the recognitions such as top performing student teams in the Technology Entrepreneurship program organized by the Indian School of Business, Hyderabad and First prize in the Smart India Hackathon 2020.

An Industry Institute Interaction Cell has been constituted to interact with the industry experts to fulfil the training needs of students and faculty. Experts from industry have been serving the institution by acting as mentors and members in its statutory bodies such as the BOS, Academic Council, and Governing Body and non-statutory bodies such as IPR cell, Innovation council. MoUs and Industry supported labs have been helping the students to make them industry-ready. With this continuous industry interaction, the institution has achieved the highest recognition such as Platinum status in AICTE-CII Survey for the four consecutive years in 2017, 2018, 2019 and 2020.

The institution has provided a very good platform for the faculty and students to conduct their research on campus. SVEC has established twelve research centres in the domain areas. Special interest groups or research clusters have been constituted with the students, faculty, and research scholars to promote multi-disciplinary research in the institution. Incentives have been offered to encourage the publication of research articles in peer-reviewed journals indexed in quality databases. Research mentors have been continuously interacting with the faculty to accelerate the research activities. The state-of-the-art library is available for the students and faculty with all the resources.

For the holistic development of students, Technical associations at Department level and NSS Unit are established and motivate the students towards community development. Various activities are being conducted to make them understand the technology intervention in community development.

File Description	Document	
Upload any additional information	<u>View Document</u>	
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: 180

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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
49	44	44	33	10

File Description	Document
List of workshops/seminars during last 5 years	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: A. All of the above

File Description	Document	
Any 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: 1.26

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

Response: 68

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

Response: 54

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

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Response: 2.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
174	178	160	200	164

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

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

Response: 0.64

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
82	69	55	36	26

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

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: 3.28

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

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

Response: 18.5	
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: 10.68

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
7.5	2.3	0	0.372	0.507

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: 57.65

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
8.292	0	6.867	25.845	16.648

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	View Document
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:

The institution has been organizing a good number of extension activities that are carried out in the neighbourhood community. SVEC encourages the students to interact with the neighbouring communities to explore the opportunities for involvement in social work. It helps in developing interpersonal relationships, leadership qualities, organizing skills, understanding the life of underprivileged people, help society in times of need, and inculcate moral and human values among the students.

The co-curricular, extracurricular, and relevant extension activities are planned in such a way that the students have ample opportunities to expose themselves to societal issues thereby promoting them to extend their domain knowledge and practical skills on a real-time basis.

The institution has been organizing the following activities for the holistic development of students.

- 1. **National Service Scheme:** The activities about community service under the scheme promote the students' attitudinal development in acquiring social skills such as empathy, respect, and teamwork.
- 2. **Health camps:** The students get the knowledge of different ailments, conditions and have the possibility of identifying a problem, formulating a problem, in making devices or computation tools or innovative methods for diagnosis and/or cure.
- 3. Tree plantations and environmental issues: The importance of man co-existing with nature and the need for a sustained approach to preserve the ecosystem becomes a serious challenge to engineers too besides policymakers and other scientists. The development of new technologies, systems, and products in compliance with environmental standards is the need of the day. The real research a student must endeavor is to mitigate all types of pollution owing to the surge in technological advancement.
- 4. **Digital literacy:** The students get enough opportunity to identify the gaps between technology development and end-user application. This entails the students to create solutions tailor-made to the need of the customers and clients
- 5. **Hygiene and cleanliness:** Pollution and untidy environs are the places where we breed communicable diseases as well project a bad picture to the people who are interested to collaborate

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- with. This becomes an important dimension for engineers to innovate tools, devices, and methods to sustain a clean environment.
- 6. Outreach activities: The students and the faculty of the departments actively engage with the college neighborhood to transfer the domain knowledge to the development of society. It is perceived as an opportunity to identify needs besides mere knowledge transfer.

World water awareness program is also organized to bring about awareness of water conservation and minimization of water wastages, for the benefit of the neighbourhood communities. International Yoga day is celebrated for the mental and health benefits and its sustainability to human beings. *Swachh Bharath*, blood donation camps, health check-up camps, flood relief camps, Off-Line/Online electoral registration process campaigns, etc. are also organized to make the neighbourhood community aware of government initiatives and also to make them adopt a good lifestyle.

All the activities are planned and conducted in such a way that they become relevant to the program domain and contribute to the students' holistic development.

File Description	Document
Upload Any additional information	<u>View Document</u>
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
4	4	1	0	1

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	<u>View Document</u>
Any additional information	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: 45

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
7	10	11	9	8

File Description	Document
Reports of the event organized	<u>View Document</u>
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document
Any additional information	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: 29.4

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
1455	2006	2530	2205	387

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: 123.6

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
161	103	127	104	123

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	<u>View Document</u>

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: 50

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
12	4	10	7	17

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:

SVEC was established in the year 1996 and is situated in a 30 acre lush-green campus with nearly 4 lakh sq. ft. built-up area. SVEC an autonomous institution which is affiliated to the Jawaharlal Nehru Technological University Ananthapur (JNTUA), Ananthapuramu. It is offering 11 UG, 4 PG and 3 Ph.D Programs. SVEC has state of the art infrastructure, creating an environment for progressive learning and development. The institution has well ventilated & equipped classrooms and laboratories as per AICTE/UGC/JNTUA requirement, to cater to the academic needs of the students. Three departments of the Institution are also recognized as Research centres by the affiliating University. The institution has more than 2100 computing facilities, servers and printers and has 2000 Mbps (2 Gbps) internet bandwidth with a contention ratio of 1:1. All the departments have separate computer laboratories to cater to the needs of their students. The institution also has licensed software as per the requirement of the statutory bodies. The college has 30 buses to cater to the needs of the students and staff for commuting to and fro from all corners of the town. The institution has separate crew to take care of the maintenance of buildings, equipments and housekeeping of the whole campus in spic and span condition at all times.

The facilities available in SVEC for Teaching-Learning Process are:

Type of facility	Total Number	Total Area in Sq. M.
Class rooms	93	7719
Tutorial rooms	26	938
Laboratories	121	10377
Seminar halls	4	560
Conference rooms	3	300
Computer Center	4	662
Language Laboratory	3	222
Library & Reading Room	1	3000
Auditorium	1	450
Drawing Halls	2	528
Workshops	3	800
Additional Workshop	1	431
	Total Area in Sq. M	25987

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File Description	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:

A sound mind coupled with a strong physique is the key to success. Sports activities occupy a significant part of the college curriculum at SVEC. Good playing fields support a wide variety of games, such as Cricket, Football, Volley ball, hockey, Kabaddi and Kho-kho. There are dedicated spaces for indoor sports including Table-Tennis, Badminton, Chess and Caroms. The outdoor facilities include a 200-metre athletic track and courts for cricket, Hockey, Basketball, Volley ball, Hand ball and throw ball.

Students with a passion for Music and dance are encouraged to perform/take-up training in these arts. Faculty with skill in any of these arts ably support students through campus cultural festivals and motivate them to participate in competitions held outside the campus. The students of SVEC participate in intercollegiate sports and games organized by the University and its other affiliated colleges. There are dedicated places for students and staff to practice yoga during their leisure time and also an exclusive gymnasium for the hostel students to practice during their free time. An open air auditorium with a capacity of more than 3000 students is in the campus where all cultural fests, annual meets etc. are organized.

File Description	Document
Upload any additional information	<u>View Document</u>
Geotagged pictures	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: 97

File Description

Document

Institutional data in prescribed format

Paste link for additional information

View Document

View Document

4.1.4 Average percentage of expenditure for infrastructure augmentation excluding salary during

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the last five years (INR in Lakhs)

Response: 128.05

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
667.06	2952.52	4349.09	1771.47	1375.25

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

4.2 Library as a Learning Resource

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

Response:

The Library of SVEC is the focal point of all user community. The primary objective of the library is to support the educational and research programmes of the Institute by providing physical and on-line access to information, consistence with the present and the anticipated academic needs. The Library has a carpet area of 4,500 Sq Mtrs spread in three floors. The library is well equipped with a reading capacity of 600 readers and is also Wi-Fi enabled. Library users have easy access to photocopying facilities. The Library has fully automated ILMS software with SOUL during 2001 to 2015 and later KOHA till date for all library services. The Library has introduced RFID based circulation system. The Library has various Text Books, Reference Books, e-books, Journals, Magazines, e-journals, NPTEL video lessons related to Engineering and allied subjects. Library has a collection of fascinating books which includes Encyclopaedia, Palm leaves, Hand books, Dictionaries, GATE and competitive examination books and videos that support the content beyond syllabus. The library has a huge collection of 1,42,422 volumes and around 22,000 Titles.

The library subscribes e-Journals IEEE – ASPP with POP, ASCE, ASME and J-Gate 7857 full text e-resources also subscribes to 150 print Journals and Magazines. The Library has Institutional Membership with DELNET, NDL, e-ShodhSindhu (N-LIST), Computer Society of India (CSI) and Institution of Engineers (IE). The Digital Library has installed around 60 systems for providing digital services and also made provision for students to refer previous semester question papers to prepare for their semester examinations.

e – journals

The Library has online access to an electronic journal that are subscribed yearly viz., Institute of Electrical and Electronics Engineers (IEEE), The American Society of Mechanical Engineers (ASME), American Society of Civil Engineers (ASCE), J-Gate, Taylor & Francis. Nearly 7857 online journals can be accessed through online intranet of the College.

e - Books

The library has e-books subscribed yearly from Digibook Technologies Pvt Ltd.- Kopykitab, Bangalore and DELNET. One can access e-books through online intranet of the College.

Digital Library

The Digital Library consists of 60 computer systems through which one can access online journals, browse internet, accessing of NPTEL Videos, Old Question Papers, Projects thesis, printing and reprography facility.

RFID Facility

The RFID facility in the Library helps in issue and return of the books by the user and is integrated with Library Management Software KOHA. Moreover, this facility also helps to identify theft of books bypassing the unauthorized entry from the reception of the library.

Open courseware

The lectures recorded by the faculty in the media centre of the college are stored in the server of the media centre and can be accessed through local guru intranet website link. These video lectures are open to access by the users across all the departments.

Copies of published dissertations in the domain

The central Library maintains a collection of old B.Tech and M.Tech published dissertations.

File Description	Document
Upload any 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

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File Description	Document
Upload any additional information	<u>View Document</u>
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/ejournals during the last five years (INR in Lakhs)

Response: 49.22

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
22.973	61.135	33.038	72.465	56.50

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	<u>View Document</u>
Any additional information	<u>View Document</u>

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: 20.57

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

Response: 1297

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

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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 more than 2100 computer systems and is upgraded periodically as and when required. As per the syllabus updating, the required software is also procured and all licensed software are renewed regularly. The internet band width connectivity is upgraded as per the norms specified by AICTE/UGC/University from time to time and at present the institution has an internet band width of 2000 MBPS (2 GBPS) with a contention ratio of 1:1. Firewall and Anti-Virus softwares are installed to ensure better security. A dedicated team of in-house staff is taking care of the IT and related needs of the campus such as software development, Hardware and Networking maintenance, website designing and hosting data and SMS solutions. Effective CCTV surveillance network in all the class rooms and in the important locations is available in the entire campus.

Wi -Fi:

The Campus has Wireless access facility for data communication. Initially this facility was restricted to only admin and for core departments. Currently, the Institution has a campus-wide Wi-Fi solution catering every department, every Corridor of the buildings, Hostels and for Guest usage. Internet access through wired and wireless method catering to all the students of various disciplines is available. Internet usage for the Students is thoroughly monitored and allows other university students to access internet of our campus through radius server.

Routers:

Earlier, the institution was using Wireless Routers and in each department it was planned and Routers were installed for Wi-Fi access, as they needed. From Sept 2015, all these routers were replaced with high performance Wireless access devices with RUCKUS.

Firewalls:

The Institution was using entry level Firewall from Cyberoam CR200-ING during 2012-13, which could hardly allow about 300 user simultaneous connections to the Net. Now the Institution has upgraded the Firewall with induction of next generation UTM (Unified Threat Management) device Sophos XG 450 for Enterprise level performance and can process up to 3000 user access on currently. It has high performance IPS and AV features protecting internal network against Ransom and other attacks. It can be configured with dual fault tolerant system in future, which allows for high level of network availability.

Antivirus:

The Institution uses enterprise class antivirus package from Kaspersky for Servers, departmental and administration computers. All other computers are enabled with built-in Microsoft Firewall and Windows Defender features. Servers and client systems are checked for signs of Virus and Malware and are cleaned periodically.

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

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

Response: 3:1

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 MBPS

File Description	Document
Upload any additional information	View Document
Details of available bandwidth of internet connection in the Institution	View 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: A. All of the above

File Description	Document
Upload Additional information	<u>View Document</u>
Institutional data in prescribed format	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: 74.5

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
653.79	1105.95	1169.91	869.12	2289

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:

SVEC has a well documented policy for infrastructure maintenance as specified by the statutory bodies both in terms of quantity and quality. The infrastructure maintenance policy of the institution is ensuring its quality and cost, up gradation from time to time, proper accounting and safe guarding, by providing inventory of equipment and maintaining asset registers, upkeep of the equipment through regular cleaning, preventive and corrective maintenance including Annual Maintenance Contracts (AMC), and insurance against damage and theft. In order to ensure the adequacy of the infrastructure including land, buildings, equipments and computer hardware, the norms specified by the statutory bodies like All India Council for Technical Education, University Grants Commission, JNTUA with respect to resources requirement, are adhered. Records of all infrastructure including equipment, software, books and other items are maintained by all the departments. All the departments adhere to the procedures and guidelines of the institution with regard to cleanliness and preventive & corrective maintenance of infrastructure.

Maintenance of Laboratories:

Daily maintenance:

- Lab Technicians inspects/checks the working condition of the equipments/computer systems cleaning of equipments and work tables are done by lab Technicians /assistant
- Floor cleaning is done by the housekeeping staff of the college

Weekly maintenance:

- Floor mopping of labs is done by housekeeping staff of the college.
- Maintenance of batteries and UPS is done to prevent corrosion of batteries terminals and proper functioning of UPS.

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Monthly maintenance:

- The monthly maintenance report is generated in which the current condition of the equipments, consumables and furniture are mentioned and submitted to the Principal.
- UPS in-charge checks the water level, voltage and backup of the UPS.
- Calibration of equipments and instruments is done as and when required.

Yearly maintenance:

- Scrap and obsolete items in the laboratories are identified by the lab in-charges in consultation with the lab instructors.
- Action is initiated to dispose of the scrap/obsolete items after getting approval from the management.

Preventive maintenance: installed

- The working condition of the equipments is periodically checked.
- The students are given instructions in handling the equipments before doing the experiments. Laboratory manuals are provided to the students which include Dos and Don'ts of the laboratory, list of experiments and procedure of doing /performing the experiments.
- Stock register is maintained in laboratories and audits are conducted by stock verification committee to check the availability and working of the equipments.
- Antivirus updating is done regularly for proper working of the computer systems and servers.

Breakdown maintenance:

• Minor repairs are carried out by the lab instructors and Major repairs are carried out by service personnel from equipment suppliers after following due procedure.

Infrastructure maintenance:

• Class rooms, laboratories, rest rooms, offices and other areas in the campus are maintained by housekeeping staff of the institution.

Library maintenance:

- Adequate number of text and reference books are procured every semester after obtaining the requisitions from the departments based on the availability of books in the library and curriculum changes.
- Stock verification is carried out every year by a team of faculty members drawn from all the departments.

Sports and games field maintenance:

- Items required for sports and games are procured on a yearly basis by PED after obtaining approval from the Head of the Institution.
- Maintenance of the college ground is carried out by the housekeeping staff under the guidance of

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PED as and when required.

• Damaged sports equipment is replaced by new one as per requirement

The institution strictly adheres to the norms and guidelines prescribed by AICTE in terms of establishing infrastructure. Based on this, a simplified operating policy is developed to create and maintain the infrastructure, for academic and support facilities.

File Description		Document	
	Upload any 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: 55.14

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
3360	3035	3281	3273	3181

File Description	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: 5.4

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
377	225	194	188	599

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File Description	Document
Upload any additional information	<u>View Document</u>
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: 46.86

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
2811	2888	1954	3778	2282

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

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- 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	<u>View Document</u>
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: 47.25

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
738	863	731	628	602

File Description	Document
Upload any additional information	<u>View Document</u>
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: 1.9

5.2.2.1 Number of outgoing student progressing to higher education.

Response: 28

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: 67.85

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
97	61	88	62	125

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
168	61	111	78	549

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

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: 11

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
4	2	0	3	2

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

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

Response:

The institution always believes that its growth and development is through active participation of its stakeholders. Students being the most important of stakeholders and play a major role, the institution values the participation of students in all the endeavours with regard to academics, co-curricular and extracurricular activities, and provides all facilities and safety. SVEC involves students in its several statutory and non-statutory bodies to let their voice be heard for their overall development, happy stay and fruitful/satisfactory take-away from the campus. The various student committees comprise of representatives from all groups of students and are led by faculty members of the institution.

Students are also members of Statutory and Non- statutory committees. The list of committees where the students are also members is given below:

- Internal Quality Assurance Cell (IQAC)
- Anti-ragging Committee and Squad
- Library Committee
- Cultural Committee
- Sports Committee
- Discipline Committee
- Women Empowerment Cell
- NSS Committee
- Departmental Magazines

Student Professional Bodies and Clubs:

The Department Technical Associations is listed below:

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- CIVIL Intellectual Association of Civil Engineers (IACE)
- EEE Electrical Technical Association (ETA)
- ME Creative Association of Mechanical Engineering Students (CAMS)
- ECE Association of Communication Majors and Enthusiasts (ACME)
- CSE Computer Engineers Technical Association (CETA)
- CSSE Systems Engineers Association (SEA)
- IT Technical Association of Information Technology (TAIT)
- EIE Association of Instrumentation Majors (AIM)
- MCA Intellectual Masters Association of Computers (IMAC)

Professional Society Chapters:

- Indian Society for Technical Education (ISTE)
- The Institute of Electrical and Electronics Engineers (IEEE)
- Instrument Society of India (ISOI)
- Computer Society of India (CSI)
- Association of Computing Machinery (ACM)
- Society of Automotive Engineers India (SAE India)
- Indian Welding Society (IWS)
- Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE)
- American Society Civil Engineers (ASCE)
- Indian Geotechnical Society (IGS)
- Indian Institution of Production Engineers (IIPE)
- American Society of Mechanical Engineers (ASME)
- Soft Computing Research Society (SCRS)
- The Institution of Engineers (India) Student Chapter
- Indian Green Building Council (IGBC)

The institution has Student clubs viz., Art & Literary, Robotics, Idea, Gaming, Web Development, Coding, Campus Radio etc.,. Students organize co-curricular and extra-curricular activities under these associations, clubs and chapters.

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: 5.8

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

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2020-21	2019-20	2018-19	2017-18	2016-17
4	6	6	7	6

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

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Response:

SVEC has a registered Alumni Association in the name of "Sree Vidyanikethan Alumni Association" with Registration No. 302 of 2018, The Registrar of Societies, Sri Balaji Registration District, Andhra Pradesh.

The Office bearers of the association are:

- 1.Mr. Vishnu Manchu, President (Edupreneur, Film Artiste & Producer, and CEO, SVET)
- 2. Prof. T. Gopala Rao, Vice President (Former Special Officer, SVET)
- 3. Mr. S. Sreenivasa Chakravarthi, Secretary (Assistant Professor, Dept. of CSE)
- 4.Mr. B. Ravisekhar, Treasurer (Director (F & A), SVET)
- 5. Mr. K. Raja Narendra Dev, Executive Member (Venture Capitalist)
- 6. Mr. G. Munvar Khan, Executive Member (MD Mineral Mining and Trading)
- 7. Mr. V. Balaji, Executive Member (Logistics Officer, SVEC)
- 8. Mr. R. Nagendra, Executive Member (Assistant Professor, Dept. of ECE)

The institution fosters a strong bond with its Alumni in networking and strengthening the relationship between the former students, present generation of students and their Alma Mater through "Recall" and its chapters. The nucleus of the alumni association is in the main campus Tirupati with chapters in prominent cities viz., Chennai, Bengaluru and Hyderabad. Alumni chapter annual meets are organized every year as most of the Alumni of SVEC are employed and working in these metro cities. This has helped in further building the reputation of the institution. With the strong support from the Sree Vidyanikethan Educational Trust and the continuous involvement of the Principal, the faculty, staff, students and alumni of SVEC, the alumni association is carrying out various activities every year.

The contributions of the alumni of SVEC is significant viz., BOS member, feedback on Curriculum from industry perspective, guidance towards placements, internships, career advancement, delivering expert talks, guiding projects, providing contacts for placements are just to name a few.

Every department maintains a strong association with their alumni. Departments organize alumni meet

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every year in which alumni of the department participate actively and give suggestions for improvement of the academic standards and employability of their juniors. The alumni actively interact with the institution and the students through several programs.

File Description	Document
Link for additional information	View Document

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

Response: C. 5 Lakhs - 10 Lakhs

File Description	Document
Any 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:

The governance of the institution is inspired by the vision statement and guided by the mission statement and evolves a perspective plan to govern and manage its affairs.

Vision:

To be one of the Nations' premier Engineering Colleges by achieving the highest order of excellence in Teaching and Research

Mission:

- To foster intellectual curiosity, pursuit and dissemination of knowledge.
- To explore students' potential through academic freedom and integrity.
- To promote technical mastery and nurture skilled professionals to face competition in the ever increasing complex world.

Quality Policy:

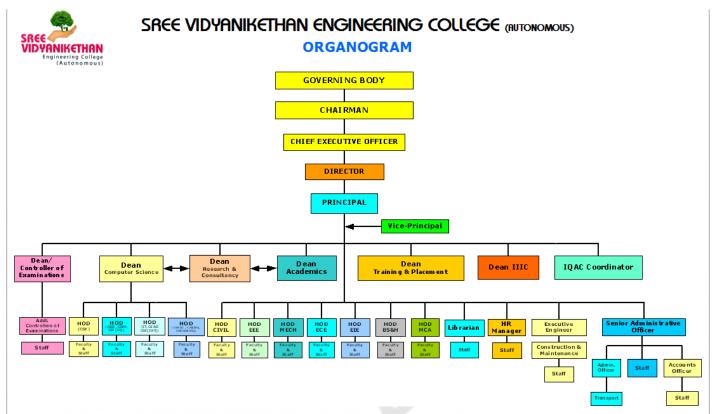
SVEC strives to establish a system of quality assurance to continuously address, monitor and evaluate the quality of education offered to its Learners, thus promoting effective teaching processes for their benefit and making the College a Centre of Excellence for Engineering and Technological studies.

Reflection of Mission and Vision in the leadership of the institution:

Achieving the highest order of excellence in Teaching and Research is the key parameter in the vision statement as perceived by the founders of the institution.

The Governing body, constituted as per the norms, is the Principal Executive Body of the Institution monitors the operations of the institution. All activities of the Institution are approved for implementation and also thoroughly reviewed and evaluated by governing body. The principal of the institution is the member secretary of the governing body. The Governing body meet at regular intervals and review the activities of the institution and provide guidance for further improvements keeping vision and mission, perspective plan and strategic plan in view.

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Formulation of action plans: The Principal makes action plans that are aligned with the mission of the institution and in consultation with academic heads and ensures implementation of plans with the active involvement of all the staff. The outcome from the implementation of action plans is reviewed through meetings with functional committees and necessary changes in action plans are made if required.

Reinforcing the culture of excellence: For the reinforcement of the culture of excellence, the vision, mission, short term and long term goals, quality policy are kept wide open to all stakeholders for suggestions. Necessary training is provided to the faculty and supporting staff for their development and motivates the team building and team work to create healthy work culture.

Perspective Plan: The perspective plan for the next five years of the institute includes NBA permanent accreditation (6 years) for all UG programs and also for PG programs, Establishing Centres of excellence in every department, collaborations for higher studies and excellence in student placement.

Participation of the teachers: Faculty members are involved in various decision-making bodies of the institute and the nature of the governance is participatory. The faculty members are nominated to apex bodies such as Governing Body, Academic Council, Board of Studies and Finance Committee. Besides these apex bodies faculty members are also nominated to the different functional committees.

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

6.1.2 The effective leadership is reflected in various institutional practices such as decentralization

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and participative management.

Response:

The institution is practicing decentralization and participative management in all its activities. The Governing body is the highest decision-making body which formulates/ amends rules and regulations, policies, and delegates powers, responsibilities to various Committees, Principal, Deans, Heads of the Departments [HoDs], and provides necessary support for the overall development of the institution. The constitution of statutory committees such as Academic Council, Finance Committee, and Board of Studies are systematically carried out with specified functions and responsibilities as per the requirements to the regulatory/statutory bodies.

The institution has a policy of participative management as a form of democratic governance and this is achieved by involving faculty, staff and students in all its academic bodies. In implementing all its action plans, the institution adheres to rules and regulations specified by statutory bodies and Governing body. The Principal is the Head of the Institution and is empowered with sufficient authority and powers for smooth functioning of day-to-day activities. All the departments of the college function under the direct supervision of the Principal. Heads of the Departments (HODs) look after the day-to-day activities and functions of various departments. The Principal, as a representative of the college, guides all Deans, HODs, faculty members and other staff in all academic and administrative matters. He encourages and supports the Deans, HODs and faculty members in ensuring a proper academic environment in the college.

The Principal, Deans, HODs and faculty members are actively involved in executing the action plans and policies for fulfilment of the Vision and Mission of the institution. To achieve this, different committees have been constituted with senior faculty members as conveners in the college and entrusted with the responsibility of implementing the programs and policies and ensure these committees function effectively for achieving the goals of the institution. Efforts are always put in by the authority to create congenial environment and suitable platform for the all-round development of its students.

The college has an Internal Quality Assurance Cell (IQAC), which meets at regular intervals and plays a crucial role in implementation of institution's quality plans.

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

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

SVEC has developed a perspective plan for twenty years from 2012-13 to 2032-33 to govern and manage

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the activities of the Institution. Strategic Plans for every 5 years have been developed and first phase is implemented during 2012-13 to 2017-18 and second phase (2018-19 to 2022-23) strategic plan is under implementation now. It is uploaded in the Institution website.

The perspective plan is developed with 8 objectives and are given hereunder:

- To establish as Premiere Technical University
- To start a National Vocational Centre
- To get International accreditation by ABET
- To develop Infrastructure required for further development
- To introduce flexible credit system
- To Create Centres of excellence in different domains for research
- To Collaborate with foreign universities for faculty and student exchange programs
- To own social responsibility for community development

The core strategies of Strategic plan are:

- Implementing systems and practices for becoming distinctive
- Expanding laterally and vertically in all the growth verticals
- Ensuring successful student engagement
- Organizing curricular, co-curricular and extracurricular activities for holistic student development
- Undertake research & consultancy for institutional development and contributions to the society
- Setting up an effective and long-term revenue generation and sustenance model to support the institutional goals and objectives

The activities for various strategies such as teaching, learning, research, consultancy, training, placement, entrepreneurship, curriculum deign, industry interaction, student development and Alumni relations were identified and planned for 5 years from 2018-19 to 2022-23.

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

SVEC has a well-defined organization structure. The Managing Trustees review and evaluate the academic progress, administrative processes and co-curricular and extension activities of the College. The Governing Body steers the organization's management systems, their implementation and continuous improvement.

Academic council reviews the academic and administrative functioning of the College. Finance Committee approves proposals for the development of infrastructure and scholarships, on the recommendations of the Academic Council.

The Principal is responsible for the functioning and growth including administrative, academic, cocurricular and extra-curricular activities of the college. IQAC of the college is involved in developing a quality system for conscious, programmed action to improve the academic and administrative performance of the College. At the department level, the Heads of the departments are wholly responsible for coordinating all departmental academic activities. Faculty are accountable / responsible for the academic and curricular development of the students. Staff members of the departments are made as members of various committees. Students are involved as active members of the committees.

Functions of Various bodies/Committees: For effective functioning of college activities, many committees are identified. Every committee consists of a chairperson/Convener, staff and student members. The functioning of every committee in the Institution is well defined. All Chairpersons/Conveners report to the Principal/IQAC who monitor the effective functioning of these committees.

Service rules: All the staffs are oriented about the Service rules available in the institution. Faculties are educated about conditions of service, and responsibilities, discharge of duties, increments, kinds of Leave, code of conduct, financial support for attending FDP/workshops/conferences, incentive for achieving academic excellence, publication of papers in reputed journals, grants received for projects from funding agencies, revenue generated through consultancy and others.

Recruitment: The qualification, teaching experience and other eligibility for recruitment is as prescribed by state Government / UGC / AICTE/affiliating University. Selection of the candidate shall be by a selection committee.

Promotion: Promotion is on the basis of performance in the Institution, and is based on availability of vacancies. All policies and conditions are clearly stated in the Administrative and service Manual of the Institution.

Grievance Redressal Mechanism: Sree Vidyanikethan Engineering College address genuine complaints, issues and difficulties of the Stakeholders at individual as well as at college level. Students are encouraged to use the Suggestion/ Feedback methods to express constructive suggestions and grievances. Grievance redressal committee resolves complaints/ grievances with sensitivity and confidentiality by meeting at regular intervals or as and when required.

File Description	Document
Any additional information	<u>View Document</u>
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

1. Administration

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

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	<u>View Document</u>
Institutional data in prescribed format	View Document
ERP (Enterprise Resource Planning) Document	View Document
Any additional information	View Document

6.3 Faculty Empowerment Strategies

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

Response:

Following welfare measures are extended to the teaching and non-teaching staff:

Teaching Staff:

- 1. Eligible for 15 days of Casual Leave per annum.
- 2. Eligible for 15 days of vacation leave at the end of every academic year
- 3. Eligible for 10 days Medical leave/Special Leaves
- 4. Entitled for Earned Leaves as per norms
- 5. Eligible for Academic leave for pursuing higher studies
- 6. Financial support is extended for attending seminars / paper presentations / workshops etc.,
- 7. Covered under Group Medical Insurance scheme
- 8. Subsidized transport facility is provided in college buses to commute to the college
- 9. Subsidized canteen facility in the institutions' canteen.
- 10. Tution Fee concession to the children in Sree Vidyanikethan International School.
- 11. Interest free Salary advance

Non-Teaching Staff:

- 1. Eligible for 15 days of Casual Leave per annum.
- 2. Eligible for 7 days of vacation leave at the end of every academic year
- 3. Eligible for 10 days Medical leave/Special Leaves
- 4. Entitled for Earned Leaves as per norms
- 5. Eligible for Academic leave for pursuing higher studies
- 6. Financial support is extended for attending workshops
- 7. Covered under Group Medical Insurance scheme
- 8. Subsidized transport facility is provided in college buses to commute to the college

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- 9. Subsidized canteen facility in the institutions' canteen.
- 10. Tution Fee concession to the children in Sree Vidyanikethan International School
- 11. Covered under Employee Provident Fund
- 12. Interest free Salary advance

File Description	Document
Any additional information	View Document

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

Response: 19.53

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
3	30	49	32	311

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: 41.8

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
44	50	45	28	42

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: 48.69

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
211	219	197	183	197

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

SVEC managed by Sree Vidyanikethan Educational Trust (SVET) ensures that both internal and external audits are conducted on all the financial transactions of the institution to make sure that all the transactions are done in a systematic and orderly manner without any deviation from the laid down financial policies and procedures.

SVEC has a dedicated, well qualified and experienced staff to carry out internal audit in the institution. Internal audit team conducts auditing of the institute's financial transactions on a continuous basis to ensure that the financial transactions are carried out properly following set procedures. Internal audit focuses on financial and other related matters which are covered in the manual. After verification of various financial transactions of different aspects, internal audit team prepares a report and submits to the Management highlighting the deviations in the implementation of the financial policies and procedures of the trust, if any. By doing this, the irregularities/deviations are brought to the notice of the concerned officials of the institution for rectification and not to repeat such irregularities in future. After rectification of deviations by the institution the report is submitted to the Governing Body for its approval.

Apart from Internal Audit, SVET has also appointed a reputed agency, M/s. Naidu & Pani Associates for conducting external audit in the institution. This external audit team functions in coordination with the internal audit team of the institution and conducts a detailed audit on all the financial transactions quarterly and submits the audited Income and Expenditure statement and also Balance Sheet once in a financial year.

The aim and objective of both Internal & External audits is to ensure that all the financial transactions are carried out within the set policies and procedures of the trust. This way the audits ensure that all the financial functions are carried out in the interest of the institute and are directed towards the prosperity and development of the institute. The contents of the Internal audit report and external audit report are brought to the notice of the concerned officials of the institute to rectify the deviations/inaccuracies, inconsistencies occurred in their day to day working. This is also to direct the concerned not to report such discrepancies in future.

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

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: 75

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	75	0	0	0

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

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

Response:

The College being a self-financing institution, the source of funds is mainly from the Tuition fee paid by different category of students admitted to the institution. In case of shortage of funds during the expansion or renovation of buildings, purchase of major equipment, SVET always supports by providing required finance to the institution. The management and the institution have a well-defined financial policy to ensure effective and optimal utilization of resources for academic, administrative and developmental activities which help to achieve the institute's vision and mission.

Financial Planning is prepared well in advance for the institution including yearly budget by involving the Principal, academic departments and administrative sections. Every year the institute's budget is prepared furnishing the expected revenue and expected expenditure including capital expenditure. This will help to utilize the funds effectively and optimally. In case of any shortage of funds, the same will be communicated to the higher-ups for their information and needful. While preparing the budget, the funds required for curricular, co-curricular and extra-curricular activities are also considered apart from salaries and maintenance of equipment and other infrastructure. The management reviews the financial activities through scrutiny of budget expenditure versus actual expenditure in every quarter to ensure that the utilization of finance is effective and optimal.

File Description	Document
Any additional information	View Document

6.5 Internal Quality Assurance System

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

The Internal quality assurance Cell (IQAC) was established in SVEC during 2012 to initiate, maintain and enhance the quality of education. The prime task of IQAC is to develop a system for conscious, consistent and catalytic improvement in the performance of the institution. The role of IQAC is the step towards the internalization and institutionalization of quality enhancement. To ensure efficient functioning of IQAC, Chief Coordinator of the IQAC interacts with various functionaries for effective implementation of IQAC suggestions and appraises Chairman of IQAC from time to time about the progress. IQAC meets every quarter, at the beginning and middle of every semester and records its deliberations and suggests improvements required, if any, in academic/administrative functions. The institution has well defined policy for the quality assurance which is ensured by the effective participation from all the stake holders. The IQAC plays a vital role in maintaining and enhancing the quality of the institution and suggests quality

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enhancement measures to be adopted. The quality assurance processes with regard to academics and administration are the integral part of the institutional policy. The IQAC has taken many initiatives for the enhancement of quality of education in the institution. Among them, two practices that have been institutionalized are:

- 1. Revised Bloom's Taxonomy and Outcome Based Education: Bloom's Taxonomy was created to provide the classic definition of the levels of educational activity, from the very simple (memorizing facts) to more complex (analyzing or evaluating information). Since the institution's objective is not to just convey information to students but to encourage their critical thinking and reasoning skills, the institution encourages higher order thinking skills from the beginning. In SVEC, Revised Bloom's Taxonomy and OBE was initiated by IQAC. Faculty are given awareness to pedagogical teaching-learning methods, Revised Bloom's Taxonomy Levels and the Outcome Based Education through various workshops and faculty development programs in the department and institution. Awareness in Bloom's Taxonomy is done to upgrade the teaching skills and formulation of question papers. The question banks prepared by faculty for the subjects they handle will be adhering to revised Bloom's Taxonomy and OBE.
- 2. Total Quality Management (TQM): IQAC has initiated TQM and constituted an Internal Academic and Administrative Audit Cell in the institution. The members of the Internal Audit Cell are nominated by the Head of the institution, one from each department, in the cadre of Assistant Professor/Associate Professor/Professor. TQM team has a TQM lead, who coordinates and consolidates the activities of the Internal Academic Audit Cell members. TQM conducts internal academic audit and submits a report to the Principal on a regular basis.

File Description	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:

As Faculty plays a major role in providing quality technical education, review of quality of the faculty member is done twice, one at the beginning of the semester and other at the end of the semester to improve the teaching learning process. It insists that faculty members participate in faculty development programs, workshops, conferences and research. Faculty members must attend FDP in order to be abreast with recent trends in technology and create an environment to appraise the students with new technologies. It then audits whether the faculty members incorporate suggested improvements to ensure quality deliverables. Faculty members must match up the pace of their deliverables to meet the students' requirements. Lecture plans must be scheduled to complete syllabus in time. IQAC analyzes the results of internal assessment examination of all subjects and guide the concerned faculty members to improve the pass percentage of students. IQAC conducts internal academic audit and takes appropriate remedial actions to improve the

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quality of technical education.

Few Important Quality Issues:

2020-21:

- 1. Incentives for Research Publications
- 2. Placement Training-Virtual Mode due to pandemic

2019-20:

- 1. Improvements in Teaching-Learning Process, Evaluation mechanism and Monitoring practices through Outcome Based Education: IQAC has formulated a well-defined mechanism to ensure improvements OBE relevant academic practices.
- 2. International Collaborations & Visit by Faculty members to foreign universities: 03 Faculty members visited Queens University, Belfast, UK to discuss on possible academic and research collaborations between the institutions.

2018-19:

1. Internal Research funding Support for faculty to undertake research in advanced areas: Under the realms of IQAC the SVEC is sanctioning internal seed funding to its research aspirant faculty to undertake research and enhance their research capabilities.

2017-18:

1. Faculty Empowerment through training advanced skills and Research Mentoring: All the faculty members are permitted to undergo training in advanced knowledge areas and skills to upgrade themselves. Faculty members with competency in research are mentored by appropriate experts to realize their potential.

2016-17:

1. Institution has Establishment of Siemens Technical Skill Development Institute (TSDI) for student skill development in association with Andhra Pradesh State Skill Development Corporation for skill development among students.

Faculty Performance Appraisal Mechanism: Performance of faculty members at work is monitored by a well-designed Faculty Performance Appraisal Mechanism. Faculty members submit their appraisals on different academic parameters and based on the satisfaction of the same, incremental benefits are provided.

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

6.5.3 Quality assurance initiatives of the institution include:

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- 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

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:

The safety and security of inmates of SVEC (students, faculty and staff) in general, and women in particular is being ensured. Measures initiated and practiced for the gender equity during the last five years are broadly classified as 1. Physical, 2. Environmental, 3. Organizational and 4. Educational, as detailed below:

1. Physical:

- 24 x 7 CCTV cameras are installed at critical locations both inside and immediate outside the campus, to keep a vigil.
- Deployment of security guards at prominent locations in the campus, for instant reach out.
- First-aid kits in all the departments and Fire extinguishers installed at important points
- Separate toilets for ladies and common rooms for girl students
- Dedicated pathways for girl students to commute between hostels and college.
- Exclusive bus facility for girl students
- Professional counseling through YourDOST Health Solutions Pvt. Ltd., Bengaluru.

2. Environmental:

- Display of Emergency contact numbers of the designated contacts personnel for quick response under emergencies.
- Thorough monitoring and security surveillance till the last woman employee/ girl student leaves the campus after the daily college work/duties.
- Safe transport facility for women staff leaving the campus in late hours of the day.

3. Organizational:

- Congenial atmosphere in the institution where women/girls are encouraged to work and study without fear and at utmost comfort.
- Boys are sensitized on the appropriate behavioral aspects towards the other gender/s, at the time of their orientation, soon after their admissions to the college.
- Women Empowerment Cell undertakes issues pertaining to girl students and women staff of the institution, for need-based redressal and counseling.
- Each class has a girl student as a representative who shall report to the concerned HoD of any untoward gender issues.
- Admissions are made by the affiliating university, following the rule of 33% reservation for girl students.
- The Institution has a fair representation of women faculty and enrollment of girl students in all the
- The technical associations of all the departments conduct awareness and empowerment programs

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on gender issues, for both the girls and boys.

• The institution celebrates events such as International womens' day and other days of gender-related significance.

4. Educational:

- Girl students are counseled periodically by the women faculty on gender related problems.
- Self-defense training classes are conducted for all girl students
- Posters advocating gender sensitivity are displayed at prominent places in the campus
- Awareness camps are arranged on the policy of anti-sexual harassment, gender discrimination and the internal complaint process, as per the statutory law/s.

Counselling and mentoring: SVEC arranges regular counseling sessions for all the students. Each faculty is assigned with 20 students for regular mentoring and counselling. These faculty members regularly meet the mentee students allotted to them and interact regarding academics, attendance, gender and any other personal issues. The faculty regularly keeps in contact with the parents of the mentees and appraises them of the performance and problems faced by of the student (if any). A professional counselling organization "YourDOST Health Solutions Pvt. Ltd.," Bengaluru also provide guidance to the students with regard to their career and placements.

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

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degradable and non-degradable waste (within 500 words)

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

Response:

Solid waste management: The institution practices the segregation of solid waste into dry and wet waste. Dust bins are placed separately for dry and wet waste, at strategic places at each building and along the road side. The dry waste consists of paper, plastic, dry leaves etc., and are collected separately. Plastic and scrap are given to the external agencies for recycling. Construction waste generated are used in land filling on the campus. The dry leaves, twigs etc., are collected and decomposed in a compost pit which is used as manure for trees and plants. The wet waste like food waste, vegetable waste and fruit waste etc., are disposed to vendors. Food waste generated in canteens and mess is disposed to piggery. The sanitary waste collected from washrooms and hostels is given to a biomedical waste agency.

E-Waste management: E-waste in the form of discarded electronic components including computers, printers, UPS batteries, multi-media systems, etc. is being stored safely and dispensed to vendors. The condemned batteries and damaged computers are disposed to authorized E-waste management agencies. Apart from this, the electronic and electrical instruments under repair are given to the students during the lab sessions to dismantle and reassemble, which help in application-oriented learning. The low configured computer are donated to nearby schools.

Liquid waste management: Liquid waste from the wash rooms, toilets of all buildings, canteen and messes is collected and transported by means of well-conceived sewerage system to three sewage treatment plants of capacities 150 KLD, 200 KLD and 250 KLD. The treated wastewater (sewage) is used for the gardens and lawns in the campus and toilet flushing. Wastewater from laboratories is disposed off into closed collecting tank after neutralizing the chemicals etc. Chemicals in the laboratories are disposed as per MSDS of each chemical. Eco-friendly floor cleaners are used periodically for cleaning toilets.

Biomedical Waste Management: Biomedical waste includes used cotton and discarded syringes, saline bottles and tubes, expired medicines and tablet covers. Biomedical waste is generated very meagerly on an average of 0.5 kg per week and it is stored safely and given to the gram panchayat for safe disposal.

Hazardous Waste Management: Hazardous waste in the form of waste oil from busses and DG set are generated is being used for smothering the construction centring sheets as a preventive measure to stop sticking of concrete to them. Some chemicals used in toilet cleaning and laboratories find its way to septic tank along with the wash water. This wash water along with the domestic wastewater is treated and reused for the purposes of watering the gardens and lawns.

SVEC has also taken several steps to restrict the generation of waste. Bio degradable plates, steel plates are used instead of plastic plates; steel spoons are used in place of plastic spoons in the canteen and hostel. Usage of plastic bags is banned in the campus. Awareness programs on waste management are conducted regularly for the faculty, staff and students, to promote awareness of adopting eco-friendly practices.

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

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
Any other relevant information	<u>View Document</u>
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
Certification by the auditing agency	View Document
Certificates of the awards received	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	<u>View Document</u>
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:

Diversity has a lot of characteristics that depend on the cultural and socio-economic factors. Diversity in the workplace and classrooms promotes healthy growth and a sense of empathy. It brings about newer perspectives and encourages tolerance. While some characteristics of diversity include age, gender, the colour of the skin, others contribute to each person's unique experience. It brings people from various walks of life together. This helps in generating ideas and perspectives which one may not have considered before. Moreover, it will help to develop sociability as well. Most importantly, diversity helps in bridging the gaps of discrimination. In addition to tolerance, it also makes one accept other people for their

uniqueness and individuality. Therefore, it enriches a person's life and makes them a global citizen. It is the duty of every citizen of the country to preserve the old culture of India, harmony and equilibrium has to be maintained. Every citizen of the country should believe in common brotherhood and try to maintain communal harmony.

Keeping all the above in mind, SVEC provides an inclusive environment for everyone, with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. Different sports and cultural activities are organized every year inside the college to promote harmony towards each other. Commemorative days like, Women's day, Yoga day, Independence day, Republic day, Unity day, Teachers day along with many regional festivals like Dasara, Diwali, Vinayaka Chavthi are celebrated in the college. This establishes positive interaction among people of different racial and cultural backgrounds. There are different grievance redressal cells in the institute like Student grievance redressal cell, Women grievance redressal cell which deal with grievances without considering anyone's racial or cultural background. Institute has code of ethics for students and a separate code of ethics for teachers and other employees which are to be meticulously followed by all.

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:

SVEC undertakes several initiatives by organizing various activities to sensitize students and employees to the constitutional obligations towards Values, Rights, Duties and responsibilities of the citizens. Every year Constitution day is celebrated in the campus by inviting eminent personalities who are well versed with the Indian constitution, to address staff and students. They narrate the fundamental rights, Duties, Values and responsibilities of citizens as stated in Constitution of India. Management representatives also address the gathering and appeal to all to remember the struggle of freedom and respect the National Flag and National Anthem. Our constitution provides for human dignity, equality, Social justice, Human rights and freedom, Rule of law, equity and respect and superiority of constitution in the national life. The whole country is governed on the basis of the rights and duties enshrined in the Constitution of India. A course on professional ethics and constitution has been introduced at UG level for all engineering disciplines to create awareness and sensitizing the students and employees to constitutional obligation. As a part of strengthening the democratic values every year Republic day is Celebrated on 26th Jan by organizing activities highlighting the importance of Indian Constitution. Similarly Constitution day also would be celebrated on 26th Nov every year. Independence Day is also celebrated every year on 15th August to highlight the struggle for freedom and importance of the Indian constitution.

File Description	Document
• Details of activities that inculcate values; necessary to render students in to responsible citizens	View Document

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

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

Response: A. All of the above

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

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

Response:

The institution organizes special events annually to commemorate the birth and death anniversaries of Indian luminaries besides some events of national importance like Independence Day, Republic Day to respect our nation and its great personalities. The institute celebrates these days to remember the events or contribution of our leaders in building the Republic nation.

- National Youth Day on 11th January
- National Girl Child Day on 23rd January
- National Voters Day on 25th January
- Republic Day on 26th January
- Smt. Sarojini Naidu Day on 13th February
- National Science Day on 28th February
- International Women's Day on 8th March
- Blood Donation Day on 19th March
- World Water Day on 26th MarchNational Health Day on 7th April
- World Intellectual Property Day on 26th April
- National Technology Day on 11th May in India, acting as a reminder of the anniversary of Shakti,

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the Pokhran nuclear test which was held on 11th of May, 1998.

- The World Environment Day on 5th June
- International Yoga Day on 21st June
- Kargil Vijay Divas on 26th July is celebrated in the campus
- Independence Day on August 15th every year to celebrate freedom
- The Teachers' Day on September 5th to commemorate the birth anniversary of Bharat Ratna Dr. Sarvepalli Radha Krishnan, a teacher, great philosopher to recognize the contributions and achievements of the teachers.
- Engineers Day on 15th September to commemorate the birth anniversary of Bharat Ratna Sir Mokshagundam Visvesvaraya to recognize the contribution and achievements of engineers.
- Gandhi Jayanthi on 2nd October to mark the occasion of the birth day of Mohandas Karamchand Gandhi, who is called the "Father of the Nation".
- Student's day on 15th October to commemorate the birth anniversary of Bharat Ratna Dr. A. P. J. Abdul Kalam, a great scientist.
- National Unity Day on 31st October
- National Cancer Awareness Day on 7th November
- Human Rights Day on 10th December
- National Mathematics Day on 21st December

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:

Title of the Practice - 1:

Centralized Midterm/Internal Assessment Examination System:

The main purpose of implementing Centralized Internal Assessment/Midterm Examination in SVEC is to bring transparency in the periodic evaluation of teaching-learning process. The centralized internal assessment examination cell organizes the Internal Assessment Examinations as per the calendar of events of the institution to assess the performance of students over a well distributed interval of time with in the semester and to make the examination an internal and integral part of the teaching process.

1. The Context:

Internal assessment is a continuous and comprehensive, in which assessment is done in relation to certain

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abilities and skills of the students. Internal assessment tests are conducted by the institution as per the norms of the affiliating university while semester end examinations are conducted by the College. Internal assessment of the students is done by the faculty handling a particular course and no external faculty is involved in the process. Internal assessment demands the outcome of the students than the ability and skills of the students. The institution's centralized Internal Assessment examination Cell is basically a well-defined and transparent methodology to evaluate the robustness of internal assessments meant for eradicating the problems relating to examination system. A good internal evaluation system allows teachers of various courses to evaluate the performance of their students in accordance with the objectives set before them.

2. The Practice:

SVEC is affiliated to Jawaharlal Technological University, Ananthapuram, Andhra Pradesh and the rules and regulations for examination process are laid down by the College/university which is communicated to the students through a book supplied in the beginning of first year of their academic orientation program. SVEC's centralized internal assessment examination cell is headed by the Principal and assisted by a senior faculty as chief coordinator who is also Controller of Examinations. An internal assessment test committee is constituted with principal as the head, a senior Professor as chief coordinator and one faculty from each department as IA coordinators. IA committee meetings are held before each internal assessment tests. The institution's exam section/cell is well established in terms of infrastructure, computing, printing and intercom facilities. Two Internal assessment tests/Midterm examinations are conducted in every semester and are communicated to students and faculty in the beginning of the semester through institute's academic calendar. The internal assessment tests and evaluation process is communicated to students by the respective departments/faculty. The same is briefed to first year students during their orientation program. Syllabus for each Internal Assessment Test is communicated to the students well in advance before each IA test by respective faculty handling the course. Question papers are set for each course by the faculty based on Revised Bloom's Taxonomy and Course Outcomes. These question papers are scrutinized by HODs for correctness and approved. Evaluation of Answer booklets is done centrally in the department within three days of completion of IA test and is based on the scheme and solution prepared by the faculty well in advance. The Answer booklets are given to students by respective faculty after evaluation for verification of marks. After verification the marks will be entered in NIVA portal by the concerned faculty.

The process of internal question paper setting followed by the institution is as hereunder:

- Faculty prepare question bank for every course handle by them covering questions as specified by university from each module and covering all the topics.
- Internal Exam coordinator of the department checks the standard of the question bank under the guidance of the HOD
- College Internal Exam Chief coordinator along with an exam team selects the final questions for internal assessment tests for each course from the question bank
- The chief coordinator arranges for printing of Question papers for all the courses of all the departments and keep in safe custody.
- Question papers are given to the internal exam coordinator of the department on the day of test, after approval from the principal.
- The chief coordinator of IA exams ensure smooth conduction of tests and organizes for central evaluation of Answer booklets.
- After every Internal assessment Exam, Total Quality Management (TQM) check is performed to

ensure that valuation is done according to scheme prepared.

• Two midterm exams are conducted in a semester which includes 2 units of syllabus for Test-1 and remaining 3 units for Test -2.

3. Evidence of Success:

The success rate in the semester end examinations has been improved after the implementation of centralized internal assessment examination system in the institution. All the internal exam related works like, finalizing and printing of test question papers, storing of all unused Answer booklets and dispatching of written Answer booklets from the concerned class rooms to the centralized exam cell are done inside the confidential room. Since the question paper is reaching the respective exam hall just like semester end exam, there is no chance of malpractice or injustice to students and transparency is clearly visible in the system. The faculty members complete the valuation within the stipulated time which helps the mentors/proctors to communicate the academic performance of their students to the parents. The students with fewer marks in the respective subjects are identified by the class in charge teachers and remedial classes are conducted.

4. Problems encountered and Resources required:

Initially there was a lot of resistance from the faculty for centralized evaluation system in the departments, as faculty was taking their own time for evaluation of Answer booklets and few faculties were evaluating Answer booklets without any scheme and solutions for the question paper. After having a detailed discussion on the entire process, the entire faculty was agreed upon to implement the Centralized Internal Assessment Examination system. A team of dedicated faculty, departmental coordinators, chief coordinator and supporting staff is very much essential for successful implementation of the system. An academic calendar clearly specifying the dates of various academic events in the institution during the semester should be strictly adhered to for implementation of this system without any flaws.

5. Future Plans:

To communicate the student's academic performance and attendance status through E-mail and also accessibility to students and parents from web.

Title of the Practice - 2:

Student Support for Comprehensive Training for enhanced employability, progression to Higher education and Entrepreneurship

1. Objective:

The main purpose of implementing Student Comprehensive Training in SVEC is to provide enhanced employability, progression to Higher education and Entrepreneurship for its students. The training program provides a variety of training modules to suit higher education or prospective career or Employment. This program facilitates continuous mentoring by experts from industry to apprise the industry demands and

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facilitate relevant skill set to its students. The core departments as a practice offer training to students in its technical domains. Students are facilitated with high quality online training database for practice. It helps in interfacing Tier-I industry and corporate for students' placements in core and IT. It facilitates with a provision for student internships in industry for real time experience with their enhanced sill-set. To organize special awareness and training for students in developing the requisite skill set for entrepreneurship with the participation of successful entrepreneurs. It helps in identifying students with entrepreneurial interests.

2. The Context:

The Indian education system is considered to progress further to deliver more in student learning outcomes and competencies. More than 70% of our nation's high school graduates continue on to college and each year our universities and colleges enrol lakhs of students. Despite these statistics, several recent studies have shown that many college students have neither good general knowledge nor the necessary skills for reasoning and employment in today's society. To thrive in a complex world, these learners should be Empowered through the mastery of intellectual and practical skills, Informed by knowledge about the domain and the allied areas and be responsible for their behaviour and professional values.

3. The Practice:

The process of training is embedded into the curriculum and is started from the first year itself. This involves the identification of student interests for his future which involves Career placement, Progression to higher education or Entrepreneurship. Appropriate content in terms of training modules are developed for students. The training programs are integrated with academic calendar, the students are trained in Online and face-to-face delivery of training and conduct Assessment and remedial sessions, if required.

4. Evidence of Success:

Student details such as On campus and off campus placements, Admission in higher education in India and abroad and Number of successful Entrepreneurs produced by the institution in due of course of time.

5. Problems Encountered and Resources Required

Accommodating training programs with sufficient slots for training in a tight academic calendar is a challenge, during their hectic schedule. Identifying quality faculty who can train students on industry relevant skills is a tough task.

Resources required for the conduct of training includes, Infrastructure for training sessions, Faculty and industry experts for training, Modern teaching and training aids and Learning Management System (LMS) for implementing and monitoring the training systems

6. Future Plans:

The futuristic course of action includes the induction of training into student academic course structure to facilitate more focused learning for its students.

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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:

The Institutions vision is to be one of the Nations' premier Engineering Colleges by achieving the highest order of excellence in Teaching and Research'

The area distinctive to the vision of the college is to provide quality higher education. In the process of attaining the vision, short term and long term strategic plans have been drawn. Emphasize is being given to initiate various quality measures such as augmentation of infrastructure, quality of teaching staff, increase in need based new programmes, quality certification, placement and emerge as an institute of excellence on bar with eminent institutions.

SVEC specifically emphasizes on Outcome Based Education (OBE) and Experiential Learning. The Institution meticulously regularly monitors the attainments of COs, POs and PSOs of all the programs and appropriate actions are taken based on the identified weaknesses, through a well-structured Continuous and Comprehensive Evaluation mechanism, for ushering need-based improvement. Special programs for slow and advanced learners were being organized. Special focus is given for bridging the gap between Industry and Academia through Industry Institution Interaction Cell (IIIC). A variety of teaching and learning techniques (ICT) are employed to impart knowledge and skills to students. The campus facilities are continuously augmented and strengthened.

The institution adopts robust systems for evaluation of students through internal and external assessments. The concept of IT interventions in evaluation system has provided much needed agility, accountability and transparency. SVEC is using NIVA software for the entire examination process.

The institute strength is Well-Qualified, Experienced & Dedicated faculty and staff members. Special focus on Promoting Research, Innovation & entrepreneurship through dedicated forums/cell is given. The institution has established twelve research centres in the areas of MEMS, Renewable energy, Data Analytics, Micromachining, Geotechnical Engineering, Cyber security, Signal processing, VLSI & Embedded systems, Water and Environmental Engineering and intelligent computing with the support of the Management, Government and a few industry collaborations. All the members in the research clusters have been publishing articles in peer-reviewed journals which are indexed in quality databases.

Faculty have been encouraged by providing incentives for their progress in research activities. The number of patents filed has been increasing year by year. A dedicated facility called the Intellectual Property Rights (IPR) cell has been established to monitor these activities. A well-defined Research and IPR policy has been designed to promote the research activities on campus.

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SVEC has created an ecosystem for innovation & incubation, research, Entrepreneurship, and community orientation by providing the infrastructure, mentoring network, seed support, and shared resources. An Innovation Cell was established in the college to foster the culture of innovation among faculty and the students. The Cell aims to encourage, inspire, and nurture young students by innovation with new ideas and transform them into prototypes. Institution Innovation Council (IIC) has been established at SVEC by the MHRD Innovation Cell (MIC), Ministry of HRD, Govt. of India, to foster the culture of Innovation among Higher Education Institutions. SVEC's Institution Innovation Council has been recognized as one of the Best Performing Institutions from the South-Central Zone (SCRO) for the Year 2018-19 by MHRD's Innovation Cell.

An Industry Institute Interaction Cell has been constituted to interact with the industry experts to fulfil the training needs of students and faculty. Experts from industry have been serving the institution by acting as mentors and members in its statutory bodies such as the BOS, Academic Council, and Governing Body and non-statutory bodies such as IPR cell, Innovation council. MoUs and Industry supported labs have been helping the students to make them industry-ready. With this continuous industry interaction, the institution has achieved the highest recognition such as Platinum status in AICTE-CII Survey for the four consecutive years in 2017, 2018, 2019 and 2020.

Quality education is complemented with an ever-enhanced infrastructure. The college constantly augments its infrastructure, catering to the needs of all levels of academic programmes. The infrastructure is upgraded with palatial buildings of architectural excellence along with class rooms, lab facilities, books in the library, sports gadgets, auditoriums and green initiatives. Being a co-educational institution, the infrastructure caters to the needs of both male and female students simultaneously, ensuring a gender- friendly ambiance. There are separate hostels for men and women students and provide them a home away from home.

The Library has a carpet area of 4,500 Sq Mtrs spread in three floors. The library is well equipped with a reading capacity of 600 readers and is also Wi-Fi enabled. Library users have easy access to photocopying facilities. The Library has fully automated ILMS software with SOUL during 2001 to 2015 and later KOHA till date for all library services. The library has a huge collection of 1,42,422 volumes and around 22,000 Titles. The Internet bandwidth has been increased to 2 GBPS to provide network connectivity to all students and staff of the college.

Students and teachers are encouraged to register for online courses offered by NPTEL and the college is one of the active centres. In addition to teaching and research, the college grooms its students with societal responsibility. The student's active participation programmes such as Swatch Bharth has gained them a place in Unnat Bharat Abhiyan.

File Description	Document
Appropriate web in the Institutional website	<u>View Document</u>

5. CONCLUSION

Additional Information:

Philosophy

Sree Vidyanikethan Engineering College believes in, that the students have to acquire sound knowledge in the domain, develop skills to practice engineering efficiently and imbibe an ethical attitude to continuously explore solutions for the development of the society and nation.

It is a strong belief that 'teachers are the soul of the educational institution' and strong teaching-learning process is considered as the bedrock for great student learning outcomes and progression.

The management is committed to provide state of the art infrastructure for teaching learning process, research, consultancy and industry initiatives besides establishing faculty, staff and student support and development mechanisms.

The total quality management of the institution is to ensure the best satisfaction of all the stakeholders.

Concluding Remarks:

In pursuit of excellence, Sree Vidyanikethan Engineering College strives to establish a laudable system of quality assurance to continuously address, monitor and evaluate the quality of education offered to its Learners. Thus promoting effective teaching processes for the benefit of students and making the College an envious Centre of world class Engineering and Technological education.

- Implementing Systems, practices for becoming distinctive
- Expanding laterally and vertically in all the growth verticals
- Ensuring successful student engagement
- Undertaking research and consultancy for institutional development and contribution to the society
- Organizing curricular, co-curricular and extracurricular activities for holistic student development
- Setting up an effective and long term revenue generation and sustenance model to support the institutional goals and objectives

The passion of the Management has been to make this Institution a Centre of Excellence as reflected in all its spheres of activities. Proven track record of quality education, research endeavors, modern infrastructure, vibrant training and placement activities, quality human resources, uncompromising discipline and quality conscious management are the hallmarks of the institution. The institution has also set for itself aspirational future goals to

- develop as a world class university in teaching, training and learning
- conduct quality research for institutional and national development
- create a vibrant platform for innovation and entrepreneurship
- develop into a regional centre for extension and social responsibility

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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 last five years.

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

Answer before DVV Verification: 83 Answer after DVV Verification: 16

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

Answer before DVV Verification: 83 Answer after DVV Verification: 16

Remark: DVV has given the input as per IIQA.

- 1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.
 - 1.2.1.1. How many new courses are introduced within the last five years

Answer before DVV Verification: 1360 Answer after DVV Verification: 1260

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

Answer before DVV Verification: 2231 Answer after DVV Verification: 2131

Remark: DVV has excluded repetitive courses from shared report by HEI.

- 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
9	8	3	1	2

Answer After DVV Verification:

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

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
13	13	12	11	8

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
7	10	11	9	8

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

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.

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
3247	2706	3130	2515	387

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1455	2006	2530	2205	387

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

5.3.3.1. Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
4	9	9	10	9

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
4	6	6	7	6

2.Extended Profile Deviations

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

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
3702.20	5896.12	6547.34	3874.95	2289.91

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
1827.57	2722.36	1567.69	1472.67	1409.13