SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

SRI VENKATESHWARA COLLEGE OF ENGINEERING

SRI VENKATESHWARA COLLEGE OF ENGINEERING, VIDYANAGAR,
KEMPEGOWDA INTERNATIONAL AIRPORT ROAD, BENGALURU-562157
562157
www.svcengg.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

September 2019

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Sri Venkateshwara College of Engineering (SVCE), Bengaluru is a self-financed Institute, affiliated to Visvesvaraya Technological University (VTU), approved by AICTE and Government of Karnataka, established in the year 2001 by Honourable Chairman Sri V Muniyappa. The campus is attractively landscaped in an 11 acre land at Vidyanagar, Kempegowda International Airport Road, Bengaluru with all sophisticated amenities for incorporating world class education.

SVCE is a unit of Sri Venkateshwara Group of Institutions (SVGI). SVGI caters to the educational needs of the society from child education to Doctoral Degree programmes in Engineering and Management. The Institute offers six Under-Graduate, five Post-Graduate and six Doctoral Degree programmes. Five undergraduate programmes in Mechanical (ME), Computer Science (CSE), Electronics and Communication (ECE) and Civil (CE) Engineering are accredited by National Board of Accreditation (NBA). Six departments – ME, CSE, ECE, EEE, Civil, and Chemistry - have been approved as research centers by VTU to offer Ph.D Programmes. SVCE is listed among colleges under Sections 2(f) & 12 (B) of UGC.

Under the able guidance of Sri V Muniyappa, Chairman and Dr. Shashidhar Muniyappa, Chief Executive Director (CED), the institute is engaged in developing graduates with innovativeness, effective communication and ethical engineers to cater to the needs of technology in the changing world. The Institute has created an encouraging environment for effective holistic teaching and learning, fosters active research through its research centers.

Institute has received several world class recognitions which includes "GOLD BAND RATING from the most prestigious Indian College and University Ranking Organisation QS I-Gauge", "Engineering College of the year 2016 by Higher Education Review".

Vision

To be a premier institute for addressing the challenges in global perspective.

Mission

M1. Nurture students with professional and ethical outlook to identify needs, analyze, design and innovate sustainable solutions through lifelong learning in service of society as individual or a team.
M2. Establish State of the Art Laboratories and Information Resource centre for education and research.
M3. Collaborate with Industry, Government Organization and Society to align the curriculum and outreach activities.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Sri Venkateshwara College of Engineering is run and managed by highly determined visionaries who are committed to improving the quality of technical education.

1. Institute is run and managed by Self-Financed Society, strategically located at a distance of 22 Km from Bengaluru on National highway No.7 and close proximity to the Kempegowda International Airport.
2. State of the art infrastructure with lush green learning environment and imparting holistic education.
3. Four programmes of the Institute are accredited by NBA and the Institute has obtained GOLD BAND rating by the QS I-GAUGE.
4. Developing student's leadership abilities through the biannual cultural festival KALAVAIBHAVA, annual sports events and technical competitions SRUSHTI & UDYUKTA.
5. **Centre of Excellence**: SVCE-TKM in Automobile Engines, SVCE-VMWARE in Cloud Computing.
6. **R&D Activity:** Research in Bio-fuel, Composite materials, Reinforced Concrete, and Stabilized mud blocks, Water Treatment, Soil stabilization, Cloud Computing, Building Structures, etc. Developed 16 patentable products. Received research grants from VGST, ISRO, KSCST, AICTE & VTU.
7. SVCE Connect, our registered Alumni Association with a good alumni network which inspires the present students.
8. Outreach programs in the neighborhood community through NSS activities.
9. Effective utilization of naturally available resources such as Solar Power generation, Sewage Water Treatment Plant and Rain water harvesting by recharge wells.
10. Encourage students to organize and participate in technical activities such as Seminars, Workshops and Industrial visit etc.
11. Qualified, passionate and committed faculty with good faculty retention and good student enrolment ratio.
12. On campus separate hostel facility for boys & girls with security measures.
13. Good student mentoring system in place.
14. Internet connectivity with 100MBPS with Wi-Fi.
15. Dedicated Training & Placement cell.
16. Language labs, Yoga & Meditation classes.

Institutional Weakness

SVCE is always keen to overcome the constraints it encounters. To enhance the quality of Teaching, learning and research, it requires proactive steps. In spite of continuous effort to overcome the limitations, there are certain areas where progress needs to be made.

The constraints in the following fields need to be overcome:

1. Fewer Placements in core companies.
2. Student participation in National /International level events needs to be improved.
3. Collaborative Research and Patents needs to be strengthened.
4. Need to strengthen Industry-Institute interaction.

Institutional Opportunity

Optimism is what drives any organization to move forward. Over the last two decades SVCE has taken advantage of the opportunities available and moved forward with a high level of optimism. The college has the potential to climb further to newer heights in the days to come, the various opportunities that can be harnessed are

1. Become an autonomous institute which enables to design the curriculum to meet the industry requirements.
2. Being in the industrial & IT hub, the institute can inspire large number of its students to become entrepreneurs.
3. Faculty & Student exchange programmes can be enhanced with neighboring Industry & institutes.
4. Further strengthening of the alumni association may be reflected in enhanced placements.
5. Having more number of faculties with Ph.D. & research scholars, it is possible to develop marketable and patentable products.
6. The Institute's Q-RIDES wing can stretch its arms multi-way to bring the technology to the need's door steps.
7. Possibilities to enhance the sponsored research, consultancy & incubation activities.
8. To get ranking in NIRF.

Institutional Challenge

The institute is facing many challenges.

1. Diminishing admissions to core engineering programmes due to severe competition (uncontrolled intake) by the nearby Universities.
2. To attract core companies for placement.
3. Global recognition of the Institute for faculty & student exchange.
4. Attracting top ranking students.
5. Meeting the industry demands and expectations in terms of emerging technologies still continues to be a challenge.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The Institute is affiliated to the VTU, Belagavi. The University has introduced Choice Based Credit System (CBCS) in the curriculum. All UG Programmes have been granted permanent affiliation by the University (Excluding Mechatronics UG Programme). The Board of Studies (BOS) takes the responsibility of design/review the curriculum for every programme every four years or even before the term of four years, on the basis of feedback from the affiliated colleges. After approval by the Academic Senate and the Executive Council of the University, the syllabus will be notified to the affiliated Colleges for implementation. The Department Advisory Board (DAB) consisting of senior faculty members, industrial representatives and alumni of the Programme identifies the gap in the curriculum and prepares the action plan to fill the gap to meet the

required standards by the Industry. The identified gaps are filled by conducting training programs, seminars, workshops, industry visits, internships, projects and technical talks.

Each course is allocated to a specific faculty based on the specialization, interest and expertise depicted through the competency and skill matrix. A detailed timetable is prepared in line with the University Calendar of events and is strictly adhered to. The institute has conducted 18 subject related certificate programmes and 1278 students have undergone training.

Teaching-learning and Evaluation

The Institute is involved in preparing socially responsible Engineers for future. Hence, the teaching-learning process is given highest priority. All programmes follow Outcome Based Education (OBE) system. All the class rooms are equipped with ICT facilities. Contents are delivered through Chalk & Talk, PowerPoint Presentations, Model display, Role-play, Experimentation, Video play, Industrial visits, Internships, Field Projects, Mini Projects, Technical & Cultural Fests, Seminars, assignments entrepreneurial trainings, etc. An effective online feedback system is in place. Centralized Internal Assessment (IA) tests are conducted as per the calendar of events. Complete transparency is ensured in the entire assessment process. An in-house Question Paper Delivery System (QPDS) is developed and is being used to generate IA question papers 30 minutes before the test. Slow learners are identified and nurtured by conducting remedial classes and counseling. Fast learners are motivated to participate in seminars, workshops, conference, etc. which are organized by various reputed institutions and inhouse programs.

Overall enrolment in the last five years is 76.45% with 4.1% students from other states and countries & 33.16% admission from various reserved categories. The Institute has adequate and qualified faculty members with 13:1 Student-Teacher ratio to ensure quality teaching – learning with an average experience of more than 8 years. More than 12.74% (25) are doctorates from reputed Universities. Three faculty members are identified as Board of Studies (BoS) in VTU and other Universities. The Institute has exhibited very good academic performance in the University examinations, the average result is 94.69% in the final year.

Research, Innovations and Extension

The Institute has set up six Research Centres affiliated to VTU in the department's *viz*., CSE, ECE, ME, CE, EEE and Chemistry. There are over 30 research scholars pursuing the Doctoral Program and awarded six Ph. D. The department of Mechanical Engineering has established a full-fledged Bio fuel R & D Centre and TKM, IC-Engine training centre. Apart from the department R & D Centres, SVCE established center for Q-RIDES, a dedicated wing to achieve Quality Assurance, Research, Incubation & Innovation, Design & Development, Entrepreneurship, and Social Responsibility. The Q-RIDES wing has developed 10 patentable products & applied for patent.

Financial assistance is extended to the faculty to encourage research paper publication in Conferences/Journals of high repute and attend FDPs. Faculty have contributed more than 376 journal publications and 199 publications in conferences. Research grants of Rs. 114 lakhs have been received grants from ISRO, VGST, DST, VTU, KSCST and Industries. Workshops/Seminars have been organised on "Intellectual Property Rights" to initiate incubation activities.

The Institute hosted AICTE and MHRD initiative "Smart India Hackathon" event in the years 2017 to

2019. Asia level IEEE Project competition - SS12 was held in the years 2016, 2017 and 2019. ICT Academy sponsored Youth Talk is being organised since 2017. More than 600 student volunteers participated in NSS, blood donation and social activities.

Infrastructure and Learning Resources

The Institute is spread over on a sprawling 11 acres of lush green campus with 31,273.47 sq.mts built-up area with state of the art infrastructure and learning resources including 49 classrooms, 47 well equipped laboratories & more than 575 computers with Student to Computer ratio 3.9:1 and all computers are connected to 100 Mbps leased line through LAN/Wi-Fi with 08 access points.

All class rooms, seminar halls & auditorium are furnished with ICT facilities. Adequate sports facility for outdoor and indoor sports activities including Gymnasium is provided. An Amphi-theatre with 1052.76 sq.mts is available for conducting cultural events. Spacious Central Library with 819.15 sq.mts area has a total of 44076 volumes and 5933 titles, 40 Print journals, E-journals and E-consortium. Separate SC/ST book bank facility is available with 1012 titles. An average of Rs. 33.85 lakh/year is spent on purchase of books, e-journals, print journals, etc. in the past 5 years. Library system is automated using Libsoft Software. Digital library facility is also available for accessing e-journals. The Library is enriched with 73 rare books. An average of 135 users access the library every day. The Institute has well maintained supporting facilities like; Hostels, lift and ramp, Canteen, Transportation, Health Centre and 9 RO water plants with 100 litres/hour capacity.

Student Support and Progression

The Government has provided the scholarships for more than 4400 students in last five years. All the final year students are benefitted by the capability enhancement programmes such as Guidance for competitive examinations, Career counseling, Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga and meditation & Personal Counseling. Transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases is in place. Periodic meetings are held to resolve grievances, if any.

The Institute fosters sports & cultural activities like KALAVAIBHAVA to nourish the tradition and culture of our country. Four students have got awards in different activities at State/National level. The Institute has conducted 13 sports and cultural activities in the past five years. Students are motivated to participate in academic & administrative bodies/committees of the Institution.

The registered Alumni Association is functioning effectively. The Alumni's have donated a statue of Sir. M. Visvesvaraya, model room for Civil Engineering and Sponsored Rs. 50000/- for the International Conference organized by the Department of Mechanical Engineering in 2017-18. Alumni meet is being organized every year, which has witnessed immense response from the alumni. The Institution has provided the basic facilities to start-up for alumni, such as MBharathi Industry 4.0 engaged in 3D printing technology. More than 1000 students have been placed in various firms accounts to 53.34% of final year students. About 113 students have progressed to higher education. The students have also qualified in competitive examinations such as GATE, Civil Services, etc.

Governance, Leadership and Management

The Institute is managed by the great visionary Shri V Muniyappa, Member of Legislative Assembly, Shidlaghatta Constituency Karnataka and guided by Dr. Shashidhar Muniyappa, Chief Executive Director. The Principal is Member Secretary of the Governing Council of the Institute and convenes the meeting of Advisory Committee.

Vision and Mission statements are framed with the involvement of all stake holders. The Institute has deployed strategic plans to achieve accreditation and ranking by NBA, NAAC, NIRF, QS I-Gauge and ARIIA. The Institution inducted Mechatronics Programme, center for QRIDES and also intended to obtain Autonomous status. The Institution has demonstrated decentralization and participative management through 20 academic / administrative committees. E-governance is adopted in the areas of administration (COSEC), Finance and Accounts (Saral & Tally), Student Admission and Support (OPTRA) & Examination operations (QPDS) and Food management (SVCE food court). Various welfare measures such as PF, ESI, Free transportation for nonteaching staff, Sick leave, emergency leave, earned leave, fees concession in SVGI School and colleges for the children of the employees is extended to all the staff of SVCE. More than 30 faculty members are benefitted by the financial support provided to attend conferences & workshops. Faculty members are enriched through 41 Faculty Development Programmes. A well-designed performance appraisal system is in place, the faculty enters all the data pertaining to the achievements in an online portal OPTRA for evaluation.

The Institute conducts internal and external financial audits every financial year. Internal Quality Assurance Cell (IQAC) was established on 4th August 2014 & has contributed significantly for various Quality Assurance activities.

Institutional Values and Best Practices

SVCE strongly believes in fostering the dignity & value of every individual. Gender equity promotion Programmes are organized every year. The Institute ensures safety & security of students and employees by providing security personnel and CCTV surveillance. Counseling & common rooms for girls are provided. All necessary information is communicated to the students through digital media.

The Institute is keen in effective utilization of natural resources, 93.41 % annual power requirement is met by solar energy sources, remaining extra power are supplied to the grid. About 23.42% annual lighting power requirement is met through LED bulbs. Effective waste management is ensured at all levels. More than Rs. 8 lakhs is spent on green initiatives for paperless office and plastic free environment.

SVCE is situated in prime location of Bengaluru city. It is continuously reciprocating with its neighbours to address the locational advantages & problems by conducting more than 80 initiatives.

Code of conduct handbook for students and teachers & core values of the Institute is available on the Institute website. The Institute is profound on celebrating National festivals to uphold the Majesty & integrity of the country. Human Values and professional ethics are being taught in the curriculum. The Institute strictly adheres to the rules and regulations of the University, AICTE and Govt. of Karnataka. The Institute has conducted 35 activities for promotion of Universal values. Academic & administrative audits are also in place. Meditation classes and design thinking classes are conducted regularly to create holistic learning environment and to ignite the young minds.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	SRI VENKATESHWARA COLLEGE OF ENGINEERING
Address	SRI VENKATESHWARA COLLEGE OF ENGINEERING, VIDYANAGAR, KEMPEGOWDA INTERNATIONAL AIRPORT ROAD, BENGALURU-562157
City	BENGALURU
State	Karnataka
Pin	562157
Website	www.svcengg.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	SURESHA	080-9731226262	9845569977	080-2847746 1	principal@svcengg .com
Professor	PANCHAKS HARI H V	080-8050527128	8660807775	080-2844504 5	registrar@svcengg. edu.in

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 of the college	01-08-2001

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

State	University name	Document
Karnataka	Visvesvaraya Technological University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	05-05-2017	View Document
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	30-04-2018	36	Extended for three years

Details of autonomy

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

Recognitions

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

Location and Area of Campus				
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**
Main campus area	SRI VENKATESHWARA COLLEGE OF ENGINEERING, VIDYANAGAR, KEMPEGOWDA INTERNATIONAL AIRPORT ROAD, BENGALURU-562157	Urban	11	31273.47

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	**Name of Programme/Course**	**Duration in Months**	**Entry Qualification**	**Medium of Instruction**	**Sanctioned Strength**	**No.of Students Admitted**
UG	BE,Electronics And Communication Engineeirng	48	XII STD	English	120	102
UG	BE,Computer Science And Engineering	48	XII STD	English	180	179
UG	BE,Information Science And Engineering	48	XII STD	English	60	59
UG	BE,Mechanical Engineering	48	XII STD	English	60	41
UG	BE,Civil Engineering	48	XII STD	English	120	77
UG	BE,Mechatronics	48	XII STD	English	60	22
PG	Mtech,Electronics And Communicatio	24	BE	English	24	3

	n Engineeirng					
PG	Mtech,Comp uter Science And Engineering	24	BE	English	24	1
PG	Mtech,Mech anical Engineering	24	BE	English	24	1
PG	Mtech,Civil Engineering	24	BE	English	24	17
PG	MBA,Master Of Business Administrati on	24	ANY DEGREE	English	60	59
Doctoral (Ph.D)	PhD or DPhi l,Electronics And Commu nication Engineeirng	60	M Tech	English	8	1
Doctoral (Ph.D)	PhD or DPhi l,Computer Science And Engineering	60	M Tech	English	10	2
Doctoral (Ph.D)	PhD or DPhi l,Mechanical Engineering	60	M Tech	English	6	1
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	60	M Tech	English	12	6
Doctoral (Ph.D)	PhD or DPhi l,Chemistry	60	M tech	English	2	0
Doctoral (Ph.D)	PhD or DPhi l,Electrical And Electronics Engineering	60	M Tech	English	0	0

Position Details of Faculty & Staff in the College

Teaching Faculty											
	Professor				**Associate Professor**				**Assistant Professor**			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				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/Society or Other Authorized Bodies				14				6				144
Recruited	12	2	0	14	4	2	0	6	89	55	0	144
Yet to Recruit				0				0				0

Non-Teaching 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				86
Recruited	57	29	0	86
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				36
Recruited	29	7	0	36
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	12	2	0	4	2	0	0	0	0	20
M.Phil.	0	0	0	0	0	0	1	5	0	6
PG	0	0	0	0	0	0	88	50	0	138

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

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

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
Doctoral (Ph.D)	Male	6	0	0	0	6
	Female	4	0	0	0	4
	Others	0	0	0	0	0
UG	Male	246	56	0	5	307
	Female	156	17	0	0	173
	Others	0	0	0	0	0
PG	Male	48	2	0	0	50
	Female	31	0	0	0	31
	Others	0	0	0	0	0

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

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	28	24	25	16
	Female	20	23	16	14
	Others	0	0	0	0
ST	Male	15	13	10	10
	Female	7	7	9	3
	Others	0	0	0	0
OBC	Male	216	207	213	251
	Female	140	144	157	150
	Others	0	0	0	0
General	Male	104	118	116	138
	Female	41	68	60	67
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		571	604	606	649

3. Extended Profile

3.1 Program

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

Response: 2515

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

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

3.2 Students

Number of students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2239	2234	2294	2295	2273

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
150	150	150	150	150

File Description	Document
Institutional data in prescribed format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
585	583	533	526	523

File Description	Document
Institutional Data in Prescribed Format	View Document

3.3 Teachers

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

2018-19	2017-18	2016-17	2015-16	2014-15
164	184	170	170	153

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
142	184	188	188	188

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 54

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

2018-19	2017-18	2016-17	2015-16	2014-15
853.22	782.72	716.78	781.60	744.89

Number of computers

Response: 575

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

The curriculum is designed & framed by the Board of Studies (BoS) of the affiliating University and approved by the Academic council of the Visvesvaraya Technological University (VTU), Belagavi.

- The institute follows the curriculum designed by the affiliated University. The college calendar of events is prepared in line with the VTU calendar of events.
- The calendar of events includes the department meetings, faculty & head of the department meetings, parents' meetings, various events to be conducted at the Institute level, attendance calculation & display of results, internal assessment conduction.
- The individual departments prepare the department calendar of events inline with the college calendar of events. The heads of the departments ensures the adherence of all the academic activities as per the calendar of events.
- The department faculty members prepares the class time table and lesson plan as per the VTU guidelines. Lesson plan includes lecture hours, topics to be taught and tutorial classes during the semester.
- Along with university syllabus, meditation, design thinking and MATLAB classes are introduced at the first year level. Value added courses are introduced for pre-final year students. Placement training activities are also introduced for the pre-final and final year students.
- The student's performance is assessed through Continuous Internal Evaluation (CIE) by conducting Internal Assessment (IA) test and assignments as per VTU guidelines.
- The question papers for the IA are generated automatically through SVCE Question Paper Distribution System (QPDS) developed in-house which contains knowledge levels as per Bloom's Taxonomy and Course Outcomes.
- The performance of students is monitored by the individual faculty members, slow learners are identified and corrective measures are initiated.
- All faculty members maintains course files which includes timetable, calendar of events, class list, lesson plan, IA Marks Analysis, Attendance, Remedial/Tutorial Classes conducted, previous examination question papers, IA question papers with scheme of evaluation and performance details of the students.
- Whenever the University introduces a new curriculum, it organizes faculty training workshops for effective delivery of the educational programme.
- Along with the curriculum students are encouraged to participate and present their innovative ideas in various National and International Conferences to enrich their knowledge levels and boost their morale and confidence.
- The gaps in the curriculum are identified as per the industry requirements. Workshops, Seminars, Conferences, Student development programme, Internships and Industrial Visits are organized to bridge the gap between industry and academia.

File Description	Document
Link for Additional Information	[View Document](#)

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

Response: 17

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

2018-19	2017-18	2016-17	2015-16	2014-15
5	6	2	2	2

File Description	Document
Minutes of relevant Academic Council/BOS meetings	[View Document](#)
Details of the certificate/Diploma programs	[View Document](#)

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

Response: 0

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

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

File Description	Document
Details of participation of teachers in various bodies	[View Document](#)
Any additional information	[View Document](#)

1.2 Academic Flexibility

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

Response: 36.02

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

Response: 906

File Description	Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Details of the new courses introduced	View Document

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

Response: 100

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

Response: 17

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

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

Response: 11.34

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

2018-19	2017-18	2016-17	2015-16	2014-15
351	446	139	147	195

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

1.3 Curriculum Enrichment

1.3.1 Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability,

Human Values and Professional Ethics into the Curriculum

Response:

The Institute has made all efforts to build healthier and harmonious working environment with respect to issues related to Gender, Environment and Sustainability, Human values and Professional Ethics into the curriculum.

1 Gender:

- To prevent sexual harassment at workplace and to empower the women employees, the Institute has constituted 1) Women Empowerment Committee 2) Anti-Sexual Harassment Squad 3) Anti-Sexual Harassment Committee to effectively curb any unhealthy working condition for the women employees and to increase their morale & empower them.
- Equal opportunities are extended to all in every aspect of teaching and learning in the Institute as it believes that gender discrimination is a crime.
- Students of both genders holistically participate in various co-curricular activities organized in house & outside the Institute.
- Students of both genders are encouraged to participate and organize extracurricular events such as sports & cultural activities without any discrimination.
- Every year the Institute is organizing woman's day celebration to respect the women force at all levels.
- At present three departments: Information Science & Engineering, Mechatronics and Basic Science are headed by women faculty, all administrative bodies of the Institute have women coordinators/members.

2. Environment and Sustainability

- The University has made it compulsory to study "**Environmental Science & Engineering**" in their regular curriculum to create awareness related to various environmental issues the world is facing.
- Students are given ample opportunity to learn about the climate change and potential hazards of climate change.
- Various extension programmes are being organized by the Institute through NSS unit to create awareness among the rural community with respect to ecological balance and its importance.
- Students are motivated to take up projects related to environmental issues to overcome the identified problems.

3. Human Values and Professional Ethics

- The University has made it mandatory to study the "**Constitution of India and Professional Ethics**" to provide basic information about Indian constitution, to identify individual role and ethical responsibility towards society and to understand human rights and its implications.
- This course helps the students to gain knowledge , legal literacy and thereby to take competitive examinations. It helps the students to understand state and central policies, fundamental duties, electoral process, and functions of municipalities, panchayaths and co-operative societies.
- The Institute regularly organizes birth anniversaries of great personalities, National & State festivals, World Yoga day, etc. to boost morality and awareness among the staff & students.

File Description	Document
Link for Additional Information	[View Document](#)

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

Response: 11

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

Response: 11

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

1.3.3 Percentage of students undertaking field projects / internships

Response: 27.51

1.3.3.1 Number of students undertaking field projects or internships

Response: 616

File Description	Document
List of students enrolled	[View Document](#)
Institutional data in prescribed format	[View Document](#)

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and 5)Parents for design and review of syllabus-Semester wise/ year-wise
A.Any 4 of the above

B.Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A.Any 4 of the above

File Description	Document
Any additional information	[View Document](#)
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	[View Document](#)
URL for stakeholder feedback report	[View Document](#)

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

B. Feedback collected, analysed and action has been taken

C. Feedback collected and analysed

D. Feedback collected

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

File Description	Document
URL for feedback report	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

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

Response: 18.56

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

2018-19	2017-18	2016-17	2015-16	2014-15
338	377	380	458	553

File Description	Document
List of students (other states and countries)	[View Document](#)
Institutional data in prescribed format	[View Document](#)

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 76.47

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

2018-19	2017-18	2016-17	2015-16	2014-15
538	571	578	619	641

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

2018-19	2017-18	2016-17	2015-16	2014-15
756	756	780	780	780

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

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

applicable reservation policy during the last five years

Response: 47.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
43	7	88	90	126

File Description	Document
Institutional data in prescribed format	[View Document]()
Any additional information	[View Document]()

2.2 Catering to Student Diversity

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

Response:

Sri Venkateshwara College of Engineering has a Student Information System (SIS) portal Online Performance Tracking (OPTRA), used for maintaining the data of all the enrolled students. Every student and parents are given separate login and password to access the student's data from the SIS portal.

The attendance and test marks are made available in the student information portal. The access to the student's data given to the subject teacher, class teacher, Head of the Department, Principal, student and parent, this help them to track the student progress.

Subject teachers, class teacher and mentors along with Head of the Department, identify the slow learners & advanced learners by tracking their academic performance in the IA tests conducted as per the calendar of events.

Slow learners

- The IA marks and attendance of the slow learners are informed to their parents over the phone and through OPTRA software.
- The tutorial and remedial classes are conducted to improve their academic performance.
- A faculty counsellor is assigned to each student to monitor the overall progress.
- The meditation classes are being conducted to improve their concentration, confidence and to reduce stress level.

Advanced learners:

- Advanced learners are constantly guided and encouraged for participation in various competitions.
- The mentors identify their interest and talent in various domain and then guide & motivate them.
- Students are encouraged to participate in National and International Level events like paper presentation, poster presentation etc.
- The Meditation classes help them to have balanced approach towards success.
- Students are given the opportunity to utilize the laboratories during the free hours to learn other experiments beyond the curriculam.
- Students who scored more than 85% in their university exams are awarded cash prizes & certificates.
- The Institute honors "The Best Outgoing Student" award to the final year students, who have excelled in academics & in co-curricular activities department-wise to motivate the juniors to perform well in all activities.

File Description	Document
Link for Additional Information	View Document

2.2.2 Student - Full time teacher ratio

Response: 13.65

File Description	Document
Any additional information	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.04

2.2.3.1 Number of differently abled students on rolls

Response: 01

File Description	Document
List of students(differently abled)	View Document
Institutional data in prescribed format	View Document
Any other document submitted by the Institution to a Government agency giving this information	View Document

2.3 Teaching- Learning Process

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

Response:

The Institute is practicing different student centric learning methods to enhance their learning ability, these include: seminars, mini projects, paper presentations, poster presentations, etc.

Experiential learning:

Students are allowed to conduct experiments independently in practical classes. Mini projects at third year level and major projects at final year level will help in imparting the required technical skills to the students. They are encouraged to do the internships in industries & industrial visits as a part of industry-institute interaction. Mini project exhibitions are being organised to showcase their skills.

Participative learning:

- Students are motivated to participate in Quiz Competitions, Paper Presentation, Technical Seminars and Online Certification Courses to get the participative learning environment. Student development programs and workshops are conducted to enhance the learning capabilities of the students. Every classroom is provided with projector and internet facilities (Videos, MOOC, E-Shikshana (VTU) and NPTEL) to enhance their knowledge.

Problem solving:

- Encouragement is given to take part actively in AICTE sponsored Hackathon every year & motivated to participate in National level Project exhibition SS12 to enhance the problem solving ability.
- Students are motivated to take part in Training and Placement, Entrepreneurship Development and Incubation Centre (EDIC) and assisting in consultancy activities.
- Students are involved in assisting research work with Quality Assurance, Research, Innovation, Incubation, Industry Interaction, Development, Entrepreneurship, Education and Social Responsibility (QRIDES).

File Description	Document
Link for Additional Information	[View Document](#)

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

Response: 57.93

2.3.2.1 Number of teachers using ICT

Response: 95

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

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

Response: 13.65

2.3.3.1 Number of mentors
Response: 164

File Description	Document
Any additional information	[View Document](#)

2.3.4 Innovation and creativity in teaching-learning

Response:

The Institute has adopted innovative and creative practices in teaching learning process. Faculty members are supported to participate and organize Faculty Development Program (FDP), National and International Seminars, Conferences, Workshops to enhance the teaching-learning process. Along with regular method of teaching, following techniques are introduced during their student interactions:

- Working prototype models are demonstrated to enhance the learning ability using ICT tools.
- Role-plays, system simulation, quiz, surveys and demos are adopted.
- Value Added Course, Design Thinking classes are introduced along with regular university academics. Effectiveness of Design Thinking classes will be evaluated through "Idea Blast" Event.
- In practical oriented courses, students conduct experiments to improve their theoretical concepts under the supervision of the faculty-in-charge of their respective lab.
- Various software tools are made available to the faculty to teach certain topics through extensive simulation techniques.

File Description	Document
Any additional information	[View Document](#)

2.4 Teacher Profile and Quality

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

Response: 95.55

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

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

Response: 13.07

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

2018-19	2017-18	2016-17	2015-16	2014-15
25	22	25	21	17

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

2.4.3 Teaching experience per full time teacher in number of years

Response: 8.35

2.4.3.1 Total experience of full-time teachers

Response: 1370

File Description	Document
Any additional information	View Document

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

Response: 10.11

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

2018-19	2017-18	2016-17	2015-16	2014-15
7	4	5	1	0

File Description	Document
Institutional data in prescribed format	[View Document](#)

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

Response: 13.27

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

2018-19	2017-18	2016-17	2015-16	2014-15
19	26	32	24	17

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

2.5 Evaluation Process and Reforms

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

Response:

The Institute strictly adheres to the calendar of events (COE) in line with VTU calendar, which provides information about the dates of conducting internal assessment test. The Institute maintains a well-coordinated examination cell through which internal tests are conducted smoothly. The components of internal assessments include:

1. IA tests
2. Assignments
3. Conducting laboratory experiments/tests
4. Seminars and projects.

IA evaluation is entirely the responsibility of the subject teachers. The Institute has ensured the transparency and credibility of the system by introducing internal squads. Question papers are automatically generated through QPDS based on course outcome and knowledge levels, fifteen minutes before the commencement of IA test.

- Assignments will be given to the students by the respective course teacher periodically.
- Continuous evaluation in laboratory includes conducting experiment, submission of records, viva-voce and final laboratory test.

- A panel of faculty members evaluates seminars for final year students. The final year projects are evaluated phase-wise.

File Description	Document
Link for Additional Information	[View Document](#)

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

Response:

The detailed academic calendar is prepared before the start of the semester, which includes date of IA, VTU Examination, Display of Results, etc.

- Separate Examination cell comprising of Control of Examiner (CoE), senior faculty members and a team of teaching and non-teaching staff members. The allotment of the invigilation duties, seating arrangements and schedule of the subjects are controlled by CoE. The Institute has a robust and transparent system mechanism of internal assessment through question paper distribution system (QPDS).
- The question paper will be prepared as per the norms of the VTU. The faculty members upload the question bank pertaining to the subject with knowledge levels and course outcomes to the QPDS server. The question paper will be generated early 15 minutes of IA tests starts by CoE.
- The Institute maintains very strict, impartial, impersonal, confidential vigilant in smooth conduct of IA tests aided with in-house supervision, strictly adhering to University norms. Room invigilation work is allotted to two faculty members in each class room and also the internal squad team is constituted comprising senior faculty members in each department.
- The subject teacher explains the scheme of evaluation in classroom, and then evaluated blue books are circulated to the students. Any discrepancy in the evaluation is duly addressed. The IA marks are intimated to the parents through OPTRA and displayed on the notice board.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

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

Response:

At the Institute level, University Examination committee, comprising of The Principal (Chief Superintendent of Examinations), Controller of Examination (COE) , senior faculty and other teaching staff as members, is constituted to deal with examination related grievances. Grievances raised by students

are effectively communicated to the University for needful actions. The responses for the grievances from the University are communicated to the students immediately. Following are the possible grievances raised by students,

- The student can apply photocopy of the answer script and revaluation as per the university norms.
- Any grievances related to university question paper like out of syllabus; after making an analysis by the subject handling faculties with Department Head inturn proceeds the same to the University immediately through the Principal.
- Repeated questions, improper split of marks, missing data, marks missed and wrong question number during semester exams are reported to the Principal in turn communicated to the Registrar Evaluation of the University.
- University decision or information after resolving the grievances is intimated to the Principal. It is also conveyed to the students through COE.

The following are the some of the discrepancies in the affiliated University Examination for which letters have been (through online and Hardcopy) forwarded through the Head of the Institute of the college to the Registrar (Evaluation):

1. Change of subject code in the student hall ticket.
2. When results of the students are withheld.
3. Subject code missing in the student hall ticket.
4. If two different arrear papers/regular papers appear on the same date to the same student.
5. Out of syllabus in the question papers and discrepancy.
6. Special provisions made to write examinations to those who have met with an accident related issues and for differently abled with the prior permission of the Registrar Evaluation of affiliated university.

File Description	Document
Link for Additional Information	[View Document](#)

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

Response:

- The detailed academic calendar is prepared before the start of the semester in line with the University calendar of events which includes date of IA, VTU Examination, Display of Results, etc. The students are apprised of academic calendar and same is uploaded on college website and displayed on notice boards. Any minor change if required during the semester can be incorporated by the Principal in the academic calendar.
- The schedule of all continuous internal evaluation tests is highlighted in the calendar of events, so as to bring awareness among faculty and students regarding the topics included in each IA test. The subject teachers announce the syllabus, assignment and its knowledge level to the students well in advance. Controller of Examination (CoE) announces the schedule of internal assessments with subject. Results of IA tests will be announced within 3 days from the last day of IA test.
- Students are encouraged to discuss any grievance with respect to the evaluation process with their

course teachers and get resolved their grievance.

File Description	Document
Link for Additional Information	[View Document](#)

2.6 Student Performance and Learning Outcomes

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

Response:

Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) for all programs are well stated and displayed through:

- Institute website
- Digital Display boards in all departments corridors
- Assignment Books
- Blue Books (IA books)
- Department notice boards/ Magazines/ Lab Manuals/ Department newsletters
- Awareness about COs, POs and PSOs are made to students by faculty at the beginning of the semester and through orientation programme.

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

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

Response:

- Target of POs is set for the current academic year based on the previous year academic performance.
- Course Outcomes of individual courses are evaluated considering the student performance in the internal and University examination.
- Attainment level is measured in terms of actual percentage of students getting a set percentage of marks. If target levels of POs are attained, then higher attainment levels will be set for the next academic year in order to promote continuous improvement.

If targets are not achieved the program should put in place an action plan to attain the target in subsequent

years. Beginning of every semester, Programme Assessment Committee (PAC) and Department Advisory Board (DAB) will set the target based on the Previous performance.

Course outcomes are measured based on the individual marks obtained by the students against the maximum marks. Every subject faculty will set a target to achieve. If entire class crosses this target, the particular CO is attained. This process is carried out for the entire class and final CO attainment will be calculated for the particular Test.

The courses are also mapped with their relevant PO and PSO as per the Blooms Knowledge Level and their attainment is also calculated. All these are calculated and attainment is evaluated using the excel macros developed by course coordinators and will be approved by respective programme coordinators.

Target & Attainment Levels:

University Examination

Target 40 marks (40% of 100 marks)

Attainment Level 1: 50% students scoring more than 40 marks

Attainment Level 2: 60% students scoring more than 40 marks

Attainment Level 3: 70% students scoring more than 40 marks

Internal Assessment

Target 18 marks (70% of 25 marks)

Attainment Level 1: 60% students scoring more than 18 marks

Attainment Level 2: 70% students scoring more than 18 marks

Attainment Level 3: 80% students scoring more than 18 marks

Similarly, the evaluations of attainment for Laboratory Courses are carried out.

If the target is achieved (i.e., attainment level 3 is achieved) for a course, then the course outcomes are attained for that year and hence the target is increased reasonably (approximately 5%). If the target is not achieved then an action plan is to be carried out to attain the target in the following year.

The final attainment is computed as given below:

Course Outcome Attainment = 0.6 * University Exam marks + 0.4 * Internal Assessment marks

Attainment level will be calculated using Direct and Indirect Assessment Methods.

Direct Assessment: Assessing the student performance based on University examinations marks (theory and practical examinations) and Internal Assessment (both theory and practical examinations).

Indirect Assessment Method:

1 Course Exit Survey

2 Graduate Exit Survey

3 Alumni Survey

The final attainment of POs and PSOs are computed using the following relation

Final PO & PSO Attainment = 0.8 * Direct Attainment + 0.2 * Indirect Attainment.

File Description	Document
Link for Additional Information	[View Document]()

2.6.3 Average pass percentage of Students

Response: 95.55

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

Response: 558

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

Response: 584

File Description	Document
Institutional data in prescribed format	[View Document]()
Any additional information	[View Document]()

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.59

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 114.02

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

2018-19	2017-18	2016-17	2015-16	2014-15
69.29	44.20	0.125	0.40	0

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

3.1.2 Percentage of teachers recognised as research guides at present

Response: 9.76

3.1.2.1 Number of teachers recognised as research guides

Response: 16

File Description	Document
Any additional information	[View Document](#)

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

Response: 0

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

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

File Description	Document
Supporting document from Funding Agency	[View Document](#)
Funding agency website URL	[View Document](#)

3.2 Innovation Ecosystem

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

Response:

The institution has created the following innovation, incubation facilities:

1. **Research** – Electronics & Communication, Computer Science & Engineering, Mechanical, Civil, Chemistry, Physics and MBA departments have been recognised as research center by VTU, Belgavi. Through our centres 36 research scholars have registered for Ph. D and three scholars are awarded Ph. D.
2. **Institute Initiatives for research** – The Institute has created following state-of –the –art research facilities to carryout innovations in the Institute:

- The Department of Mechanical Engineering has a set up an exclusive Biodiesel R&D unit. Bio Fuel R&D unit incorporate the Soxhlet extraction unit of 5 liter limit, Mechanical Oil Expeller, Trans-esterification unit. Research and development unit has delivered the bio diesel from novel sources. Example, Biodiesel from Waste Coffee Powder, Algae, Tamarind Seed and so forth. An Automatic Reactor of 25 liter's capacity is indigenously created to extricate Bio Diesel from Waste Cooking Oil. A Bio Diesel R&D unit has taken up a consultancy work of 4.5 lakhs till date.
- The e-Yantra embedded system and robotics lab has been established in collaboration with IIT Mumbai, MHRD, New Delhi through National Mission on Education to develop innovative projects in all branches of engineering.
- The institute has received research grants from various funding agencies like, DST, ISRO, AICTE, VGST, etc.
- The Institute has active MoU with varous Industries and universities through which industry-institute interactions, faculty, students internship and industrial visits to update with latest technology and development.

3. Incubation - Quality Assurance, **R**esearch, **I**ncubation and Innovation, **D**esign and Development, **E**ntrepreneurship and **S**ocial Responsibility (**Q-RIDES**) has been set-up at the institute to foster incubation activities. Seminars and workshops on Intellectual Property Rights (IPR) are organised to create awareness among students and faculty members. Through Q-RIDES 16 products have been developed and applied for patent. A start-up "Mbharati" is set up in the campus for 3D-printing by the alumni of our Institution.

4. Centre of Excellence:

- Department of Information Science and Engineering of SVCE is recognized as Centre of Excellence by VM Ware IT Academy to train faculty and Students in vitualization.
- Department of Mechanical Engineering, SVCE is recognised as IC Engine-Centre of Excellence in

association with Toyota Kirloskar Motor Ltd.

5. Other initiatives : Technical fest, UDYUKTA & UGAMA, is being organised every year to motivate the students and provide platform to enrich their technical skill sets.

File Description	Document
Link for Additional Information	[View Document]()

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

Response: 16

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

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

File Description	Document
Report of the event	[View Document]()
List of workshops/seminars during the last 5 years	[View Document]()

3.3 Research Publications and Awards

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

Response: Yes

File Description	Document
Institutional data in prescribed format	[View Document]()
Any additional information	[View Document]()

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

Response: No

File Description	Document
e- copies of the letters of awards	[View Document](#)

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

Response: 0.38

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 06

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

Response: 16

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

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

Response: 2.06

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

2018-19	2017-18	2016-17	2015-16	2014-15
113	138	59	24	12

File Description	Document
List of research papers by title, author, department, name and year of publication	[View Document](#)

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

Response: 1.18

3.3.5.1 Total number of books and chapters in edited volumes / books published, and papers in

national/international conference-proceedings year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
54	56	58	20	11

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

3.4 Extension Activities

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

Response:

Following extension activities are conducted in Institution to sensitize students to social and holistic development:

Initiatives by the Institute:

- The institute was selected as the nodal centre successively from past three years to organise prestigious **Smart India Hackathon**, organised by AICTE, an initiative of MHRD.
- The Institute was selected as the host Institution / Nodal centre to evaluate **SSP – Bio Fuel** Projects by Karnataka State Bio Energy Development Board, Governement of Karnataka during 2018 -19.
- Computers were donated to rural government schools near Shiddlaghatta.
- Environmental Club "PRAKRUTHI" conducted awareness programmes for village people about water conservation, cleanliness, disposal of waste, sanitation, pollution, the effects of contaminated water by means of songs, skits and street plays.
- Students and faculty members visit government schools to motivate the Rural Students towards internet usage and its applications in the current scenarios of daily lives.

NSS club activities:

- Sapling plantation
- Blood donation
- Eye camp
- Medical camp
- Dental check-up
- Awareness Campaigns on cleanliness, Health issues, Gender Issues, Society based events, etc.

File Description	Document
Link for Additional Information	[View Document](#)

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

Response: 12

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

2018-19	2017-18	2016-17	2015-16	2014-15
3	5	3	0	1

File Description	Document
Number of awards for extension activities in last 5 years	[View Document](#)
e-copy of the award letters	[View Document](#)

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

Response: 11

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

2018-19	2017-18	2016-17	2015-16	2014-15
3	2	2	1	3

File Description	Document
Reports of the event organized	[View Document](#)
Number of extension and outreach programs conducted with industry,community etc for the last five years	[View Document](#)

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

Response: 17.82

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

2018-19	2017-18	2016-17	2015-16	2014-15
960	752	106	86	95

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

3.5 Collaboration

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

Response: 428

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

2018-19	2017-18	2016-17	2015-16	2014-15
201	103	67	24	33

File Description	Document
Number of Collaborative activities for research, faculty etc	[View Document](#)
Copies of collaboration	[View Document](#)

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other

Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 73

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

2018-19	2017-18	2016-17	2015-16	2014-15
22	16	19	10	6

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

Adequate facilities such as class rooms, tutorial rooms, laboratories, research laboratories, drawing halls, library, seminar halls, and auditorium are provided in the Institution for teaching learning activities.

Details of facilities:

Class rooms	Tutorial rooms	Laboratories	Research Laboratories	Total number of Computers & servers	Drawing hall	Library and reading room	Seminar hall & auditorium
49	07	47	03	702	02	07	05+01

Classrooms: There are 49 classrooms fully-furnished, well ventilateded, spacious lecture rooms for conducting theory classes. Each class room is furnished with LCD projector and internet facility to adapt advanced teaching methods.

Laboratories: Institute has 47 laboratories to carry out the academic experiments prescribed by VTU. In addition, there are 3 laboratories to carry out the research activities.

Computing facilities: There are 702 computers which include 658 desktops, 10 servers and 34 laptops. The entire computers area unit connected with local area network and net facility. The institute has licensed softwares like MATLAB, CADENCE, STAAD Pro., ANSYS, Solid works, Edge cam, Mipower etc. In addition to the regular activities students can download research papers, browse internet, prepare report, power point presentation etc. The institute has 100Mbps lease line for the internet facility through LAN as well as Wi- fi with 8 numbers of hot spots.

Drawinghall: Two drawing halls are available at Civil Engineering department, drawing classes are conducted using drafter to draw manually.

Tutorial rooms: There are 08 tutorial rooms which are being used to conduct special classes and discuss the queries of students related to academic activities.

Seminar halls: Five Seminar halls with good audio visual facilities are provided. These seminar halls minimum of 70 seating capacity are being used for conferences, seminars, workshops and placement activities.

Auditorium: The auditorium is having 350 seating capacity with good audio visual facilities.

File Description	Document
Link for Additional Information	View Document

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

Response:

SPORTS ACTIVITIES

The Campus is provided with both basic infrastructure for education and sports. The games like Basketball, Volleyball, Badminton, Ping-Pong, Cricket, Hand ball, Softball, Throw ball, Football, Chess, Carom, Athletics and self-protection underneath trendy games; Kho-Kho, Kabbadi, etc. underneath the standard sport activities of India are conducted.

SPORTS INFRASTRUCTURE:

Facility	No.	Area/size (mxm)	Year of establishment
Synthetic basket ball court	1	28.7x15	2012
Volley ball court	1	18 x 9	2008
Shuttle badminton court	2	13.41 x 6.71	2012
Throw ball court	1	12.2 x 18.3	2008
Kabaddi court	1	12.5 x 10	2008
Kho-kho	1	29 x 16	2008
Tennikoit	1	12.2 x 5.5	2008
Ball badminton	1	13.4 x 6.1	2006
Cricket ground	1	137.16 x 152.4	2008
Football ground	1	90 x 120	2010
Athletic track 200m	1	200m	2008
Indoor	1	4.88x4.57	2006
Multi gym	1		2016
Table tennis board	1	2.74 x 1.52	2006
Caroms boards	11		2006
Chess boards	12		2006

CULTURAL ACTIVITIES

As a part of cultural activities, SVCE organizes student cultural fest *SRUSHTI* (Intra-college) – every year and *KALAAVAIBHAVA* (Inter-college) – once in two years. Student activities are categorized into art,

literature and drama which include solo dance, group dance, singing sketching, impromptu speech, mono acting, mad-ads etc. In addition to the above activities, the institution also celebrates State and National festivals.

INFRASTRUCTURE FOR CULTURAL ACTIVITIES

Facility	No.	Area/size (m)	Stage (mxm)	Year of establishment
Auditorium	1	14.5 x 30	3.9 x 7.48	2012
Amphitheatre	1	28.3 x 37.2	9.7 x 13.9	2003

File Description	Document
Link for Additional Information	View Document

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 54

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

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

Response: 48.73

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

2018-19	2017-18	2016-17	2015-16	2014-15
235	430	300	328	576

File Description	Document
Details of budget allocation, excluding salary during the last five years	[View Document](#)
Audited utilization statements	[View Document](#)

4.2 Library as a Learning Resource

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

Response:

Nature of Automation:-Partially automated

Version: - 9.8

 'Libsoft' Library management software was purchased in the year of 2008 and Annual maintenance fee of Rs.5000/-(Rupees Five Thousand Rupees only) is paid annually. This package has been designed to handle huge volumes of books and titles at lightning speed thus saving manpower. Libsoft is a Windows / Web based software and it runs in any Windows environment and hence it has excellent Graphical User Interface.

Features of Libsoft: Library services are computerizes and automated by using LIBSOFT library management software with OPAC facility. The Library has adopted open access system and all the books are bar-coded and circulation is maintained through LIBSOFT library management software by using barcode scanner.

Online Public Access Catalogue (**OPAC) :** Search for Books, Journals, CDs, etc. Web Search (connecting to Library of Congress), Reservation of Items, Material List (Unique Titles), Purchase, Requisitions, etc., Digital Library files can be directly viewed from any mode on Read only mode.

Other key features:

- Search for materials (Books, CDs, Journals, etc), Members, Vendors, Purchase orders, Transactions, Reservations, Budget Analysis, etc,
- The search can be performed for selected fields and the results can be saved in the Excel Sheet.
- Graphical representation of expenditure, Books in Demand, New Arrivals, Material distribution, Member transaction details, stock status etc. the way the user prefers.

Database Management:

- Easy maintenance of database through Backup (Taking a backup of the existing database),
- Restoring (Restoring the old database to the current one to referrer old details)
- Clearing the old transactions
- Importing and exporting the data from and to MARC 21 format using MARC tags, to facility transfer of data between networked libraries.

Administrator: Creating users (For E.g. Transaction, OPAC, Reports, Masters, Librarian, etc) with access to specific modules or sub menu along with password and expiry date. There is no upper limit and any number of users can be created.

File Description	Document
Link for Additional Information	[View Document](#)

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

Response:

Sl. No.	Name of the book/manuscript	Name of the publisher	Name of the author	Number of copies	Year of publishing
1	Solid State Physics	New Age International (P)Limited, Publishers	S O Pillai	1	2003
2	Electricity And Magnetism	Longmans, green and co	Sydney G Starling	1	1941
3	Theoretical physics	Blacki & Son Limited	Georg Joos	1	1934
4	Modern physics	Blackie & Son Limited	H. A .Wilson	1	1937
5	Properties of mater	Blackie & Son Limited	F C Champion and N.Davy	1	1948
6	Ions, Electrons and Ionizinc,Radiations	London Edward Arnold And Co	James Arnold Crowther	1	1949
7	Unified Physics	Jaiprakash Nath And Co	Dr.S.L.Gupta and Sanjeev Gupta	1	1992
8	The General Properties of matter	Edward Arnold And Co	F.H.Newman and V.H.L.Searle	1	1948
9	Statistics and Dinamics	Macmillan & Co Limited	S.L.Lony	1	1916
10	Electricity And Magnetism	Asia Publishing House	Francis WestonSears	1	1958
11	Fibre Reinforced	McGraw-Hill	P K MAllick	1	2013

	Composites(Materials Manufacturing & Design	Education			
12	Geo Graphic Information System and Environment Modelling	Prentice hall	Keith C Clarke , Bradley O Parks, Michael P Crane	1	2011
13	Hand Book Of Concrete Engineering	VNR	Mark Fintel	1	2004
14	Mechanics Of composite Materials	Tayler and Francis	Robert M Jones	1	2014
15	Structural Dynamics & Vibration In Practice(Hand book)	Elsevier	Douglas Thorby	1	2012
16	Remote Sensing and Imaging	WILEY	LilleSand & Wiler	1	2015
17	Building Construction Hand Book	Tayler and Francis	Roy Chudley & Roger Greeno	1	2009
18	Soil Mechanics & Foundation Engg	Hamilton printing	Muni Budhu	1	2010
19	Structural Plasticity limit , Shakedown & Dynamic Plastic Analyses Of Structures	Springer	Maohong Yu, Guowei Ma, Jianchun Li	1	2009
20	Environmental Remote Sensing	Macmillan Publishers India	Saumitra Mukherjee	1	2004
21					
22					
23					
:					
:					
:contd.					
73					

File Description	Document
Link for Additional Information	[View Document](#)

4.2.3 Does the institution have the following:

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

5.Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A. Any 4 of the above

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

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

Response: 29.13

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

2018-19	2017-18	2016-17	2015-16	2014-15
29.36	37.95	26.41	16.88	35.06

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

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

Response: No

4.2.6 Percentage per day usage of library by teachers and students

Response: 5.62

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

Response: 135

File Description	Document
Any additional information	[View Document](#)

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Sri Venkateshwara College of Engineering has a team of dedicated IT staff to cater to the needs related to IT infrastructure and maintenance. The institute periodically upgrades the IT infrastructure based on the requirements given by the respective departments. There are total 702 computers and servers available in the institute. The systems are connected with local area network and internet with 100 Mbps speed. The institute has all time Wi-Fi facility in the campus.

Wi-Fi access point is updated regularly to match the compatibility of high end laptop, desktop and other computer accessories. All the software's and other applications are periodically updated before the expiration. Further, all the applications are upgraded regularly as per the requirements of all the departments in the institute.

File Description	Document
Link for Additional Information	[View Document](#)

4.3.2 Student - Computer ratio

Response: 3.89

File Description	Document
Any additional information	[View Document](#)

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)
>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

File Description	Document
Any additional information	[View Document](#)

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

Response: No

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	[View Document](#)

4.4 Maintenance of Campus Infrastructure

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

Response: 54.55

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

2018-19	2017-18	2016-17	2015-16	2014-15
523	481	362	426	335

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	[View Document](#)
Audited statements of accounts.	[View Document](#)

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

Response:

The following two facts are evident that there are established systems and procedures for maintaining and utilizing physical, tutorial and support facilities

- Sri Venkateshwara College of Engineering was certified by ISO:9001:2008 till the year 2017 (July)
- Four programmes (ECE,CSE, ME & CV) are accredited by NBA till June 2022.

Maintaining and utilizing physical, academic and support facilities

LABORATORY:

Utilization: All the labs are used for the conduction of regular academic activities as per the time-table which is prepared before the commencement of every semester.

Maintenance: Before the commencement of each semester, lab in-charge checks the stock of consumable resources and working condition of the lab equipment. Requirement of any consumables and non-working equipment is communicated to the respective authority. After the approval from the concerned authority purchase of resources or repair of work of the non-working equipment is undertaken. For repair works of major equipment, quotations are invited from the vendors and then the purchase order is issued. Minor repair works of laboratory equipment are carried out internally with the help of our lab technicians.

LIBRARY

Utilization: The transaction of books in library is done with the help of software LIBSOFT. The students aspiring to use reading room have to enter their details such as name, department, login and logout time in the register kept at the entrance of the library.

Maintenance: Qualified library staffs are employed for the maintenance of the library. The budget allocation is made at the beginning of every financial year for the maintenance of the library. Based on the requirement given by all the subject faculties, the chief librarian prepares the consolidated list of the books and Journals to be purchased and seeks the approval from the management. After getting the approval from the management, the process is initiated for the procurement of Books and Journals.

SPORTS FACILITY

Utilization: The sports facility is made available to all the students throughout the year. Any sports equipment required by the students is given to them after duly entering in the register maintained by Physical Education Director (PED).

Maintenance: Maintenance of the sport complex is supervised by PED. Any sports equipment/facility required for the students is proposed to the higher authority by PED. The procurement of all the equipment/facility is carried out after the approval from the higher authority.

COMPUTERS

Utilization: For labs, computers are used as per the time table prepared at the beginning of every semester. Staff/students utilize the computers by making entries in the log book maintained in every computer lab.

Maintenance: All the computers are covered under AMC. If any additional software or upgrading of the computers is required, the requirements are proposed to the higher authority.

CLASS ROOMS

Utilization: Classrooms are used for the regular academic activities (teaching and examination) as per the time table.

Maintenance: The maintainance of class rooms such as cleaning is carried out with the help of house keeping staff regularly.

AUDITORIUM

Utilization: The need of auditorium by any department is intimated through request letter to the Principal and the same would be entered in log book maintained at office.

Maintenance: The maintainance is carried out regularly.

SEMINAR HALL

Utilization: Seminar halls are utilized to conduct seminars, workshop, FDP, etc. The prior permission will be taken by the Principal/HOD.

Maintenance: Seminar halls are maintained by the respective departments regularly.

The various facilities like canteen, xerox shop, stationery, ATM facilities, laundry and parking facility are maintained by respective service providers. The Gymnasium and playgrounds are maintained by PED. The effluent treatment plants and the rain water harvesting system are supervised by maintainance department Transport facilities are monitored and maintained by the transportation department. Fire safety equipment's installed in various blocks, maintained by the respective department.

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 39.26

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

2018-19	2017-18	2016-17	2015-16	2014-15
1109	1003	922	780	630

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

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

Response: 0

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

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

5.1.3 Number of capability enhancement and development schemes –

1. For competitive examinations
2. Career counselling
3. Soft skill development
4. Remedial coaching
5. Language lab
6. Bridge courses

7.Yoga and meditation

8.Personal Counselling

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

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

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

Response: 21.53

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

2018-19	2017-18	2016-17	2015-16	2014-15
519	538	492	461	429

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

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

Response: 0

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

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

File Description	Document
Details of the students benifitted by VET	[View Document](#)

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

Response: Yes

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	[View Document](#)
Details of student grievances including sexual harassment and ragging cases	[View Document](#)

5.2 Student Progression

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

Response: 33.64

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

2018-19	2017-18	2016-17	2015-16	2014-15
248	242	220	190	36

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

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

Response: 2.56

5.2.2.1 Number of outgoing students progressing to higher education

Response: 15

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

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

Response: 67.25

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

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

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

2018-19	2017-18	2016-17	2015-16	2014-15
26	7	1	2	1

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

5.3 Student Participation and Activities

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

Response: 7

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

2018-19	2017-18	2016-17	2015-16	2014-15
3	4	0	0	0

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

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

Response:

Students constitute a major stakeholder in the institute's growth. The institute maintains an excellent rapport with the student community. The opinions & views of the students are taken seriously by the institute authorities.

Some of the bodies/committees that have student representation are as follows.

1	Grievances Redressal Committee
2	Anti-Ragging Committee
3	Anti-Sexual Harassment Committee
4	Women Empowerment Committee
5	Hostel Development & Welfare Committee
6	Cultural Committee
7	Alumni Committee
8	Magazine/News Letter Committee

| 9 | Student Welfare Committee |
| 10 | Sports/NCC/NSS Committee |

The student representatives in the above committees play an important role by actively participating and providing suggestions for overall improvement of the academic ambiance and to build the culture of excellence.

File Description	Document
Link for Additional Information	[View Document](#)

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

Response: 1.6

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

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

File Description	Document
Report of the event	[View Document](#)
Number of sports and cultural activities / competitions organised per year	[View Document](#)

5.4 Alumni Engagement

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

Response:

- The Institute has a strong alumni association, conducting alumni meet since 2005 once in a year in the month of February/March.
- The Alumni association was registered in the year 2017 bearing registration number DRB1/SOR/148/2018-2019
- Suggestions given by the alumni are considered for overall improvement of the institute.
- The alumni have immensely contributed in terms of placements, guest lecturers, industry connect and guidance for postgraduate studies.
- The civil alumni contributed Sir M V statue (2016-17 Batch) and Model Room (2017-18 Batch)

- The alumni association builds a network among alumni and also connects with the corporate world. The association helps in holding interactive sessions to motivate current students about the employability and educational opportunities abroad.
- The Alumni provide feedback on their abilities gained during their course and provide valuable recommendations for improvements. The alumni were also involved in defining our Vision and Mission.
- The out-going students become members of Sri Venkateshwara College of Engineering Alumni Association (SAA) and they are provided with associated membership based on their year of passing.
- The alumni are advised to keep in touch with the association and participate in its meetings and furnish updates of information with regard to their career progress.

File Description	Document
Link for Additional Information	[View Document](#)

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

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: 1 Lakh - 3 Lakhs

File Description	Document
Any additional information	[View Document](#)
Alumni association audited statements	[View Document](#)

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

Response: 5

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

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

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

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

VISION
To be a premier institute for addressing the challenges in global perspective.

MISSION
M1. Nurture students with professional and ethical outlook to identify needs, analyze, design and innovate sustainable solutions through lifelong learning in service of society as individual or a team.
M2. Establish State of the Art Laboratories and Information Resource centre for education and research.
M3. Collaborate with Industry, Government Organization and Society to align the curriculum and outreach activities.

Sri Venkateshwara College of Engineering (SVCE) was started in the year 2001 under Sri Venkateshwara Group of Institutions (SVGI), approved by AICTE and affiliated to Visvesvarya Technological University (VTU), Belagavi, Karnataka. The Founder and Chairman of Sri Venkateshwara College of Engineering is Shri. V. Muniyappa and Chief Executive Director is Dr. Shashidar Muniyappa. The college has excellent support from the governing council. The Governing Council consists of Management representatives, experts from academic field, nominated VTU members, members from well established industries, experienced faculty members and Principal as member secretary. The governing council is explicitly responsible for managing the Institution's activities for achieving the institutional mission.

The Institution maintains high academic standards and has developed flexibility in dealing with changing scenario and working hard to adapt to the latest technology. The college has well equipped infrastructures, laboratories, experienced faculties, training & placement cell, hostel and social welfare activities under NSS.

Plan of action of the Governing Council helps in taking the Institute towards its stated objectives and fulfillment of its mission and vision without side tracking on vision and mission.

File Description	Document
Link for Additional Information	[View Document](#)

6.1.2 The institution practices decentralization and participative management

Response:

SVCE has a decentralized administration, provides complete transparency in the decision making process.

- The Governing Council meets at regular intervals and monitors the activities of the Institute.
- The Governing Council has specified powers to the Principal to take decisions in Academic and Co-curricular activities.
- Under the guidance of the Management, the Principal constitutes different committees for the smooth operation of the Institution.
- The Principal conducts regular meetings with the Programme Coordinators / Student Coordinators to discuss the activities of the various departments.
- The Programme Coordinators conduct meetings with faculties and non-teaching staff in their respective departments and discuss the activities as per institutes Calender of Events.

CASE STUDY:

SVCE follows standards in budgeting and over all transparency is maintained from proposal to expenditure statement. Before the financial year ends the estimated budget is collected from the departments for the next financial year. The estimated budget proposal is based on requirements provided by the faculties in-charge of lab and supporting staff. The faculty in-charge and supporting staff will propose the requirements in consultation with the Program Coordinator as per the syllabus. The budget coordinator consolidates the proposals of all labs and presents it in the budget meeting for the approval from the management through the Principal. A common template is used by all the departments which includes the following:

Laboratory Equipments: List of equipments to be purchased with comparative quotation.

Software: List of software's to be purchased with comparative quotation.

Laboratory consumables: Consumable requirements

Maintenance and spares: Includes servicing equipments, Internet/WiFi, Furniture maintenance, AMC etc.,

Research and Development: For the promotion of research activities and filing the patents.

Training and travel: For the faculties to participate in Faculty Development Programmes, Workshops, internships etc. Students are also encouraged and sponsored to participate in Student Development Programs like workshops, competitions and so on.

Miscellaneous Expenses: Stationary expenses.

 The Proposed budget is approved in the budget meeting. Thereafter the purchase process will takes place through purchase committee based on the quotations received from various vendors. The expenditure statement is prepared by the end of each financial year and the balance sheet is presented in the budget meeting.

File Description	Document
Link for Additional Information	[View Document](#)

6.2 Strategy Development and Deployment

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

Response:

SVCE believes in hard work and excellence in all dimensions in the way in which the faculty and the students gets opportunity to learn new skills to meet the global changes happening in day to day life.

The Institute has successfully implemented many strategic plans in the past years. One such plan is the research center named Quality Assurance, Research,Innovation,Incubation,Industry Interaction, Development, Entrepreneurship, Education and Social Responsibility (Q-RIDES).

The centre for Q-RIDES inculcate innovative and research capabilities within undergraduate students for product design and development.

The various functionalities are described below:

Industry Institute Interaction:

To reduce the gap between industry and academia, the team interact with various industries.

Entrprenuership Cell:

To respond effectively to the emerging challenges and opportunities both at National and International levels relating to MSME.

Consultancy:

The centre for Q-RIDES provides consultancy services to various Institutes and Industries based on their needs. The team Q-RIDES have experienced and dedicated certified trainers for various trainings like NBA, NAAC, OBE etc..,

Training:

Team Q-RIDES training division focused on enriching the Skills of the students in various aspects apart from regular curriculum which includes Design Thinking, Value Added Course etc..,

Social Responsibility:

The centre for Q-RIDES guides the students to provide innovative solutions for social problems. This lead to scalable and sustainable enterprises having a social and economic impact.

File Description	Document
Any additional information	[View Document](#)
Strategic Plan and deployment documents on the website	[View Document](#)
Link for Additional Information	[View Document](#)

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

Response:

Programme Coordinator committee:

- Involves in planning and framing timetables for odd/even semester as per calendar of events.

Budget & Purchase Committee:

- Prepare annual budget for next financial year
- Takes appropriate action for the approval of purchasing.

Grievance Redressal Committee:

- Receiving of the grievances from the staff and students
- Conduction of meetings frequently on the need basis
- Initiation of appropriate actions

Anti Ragging Committee:

- Preserves a Ragging Free atmosphere in the Institution
- The Anti-Ragging Squad keeps careful watch in the places of Student gathering including, Hostels, Classrooms, Canteens, Play Grounds Buses, etc.,

Anti Sexual Harassment Committee:

- The committee is made functional with senior women faculty of each department and Principal as the Chairman. Anti sexual harassment Squad members are also assigned by the organizational head.
- It addresses the complaints from members of the College including staff, students and hostel residents.

SC/ST/OBC Welfare cell/Committee:

- Functions as a Grievances Redressal Cell for the SC/ST/OBC students of the Institution and provides necessary help for the needy.

Hostel Development and welfare committee:

- Acts as a bridge between the administration, caterers, hostel authorities and the students.
- Facilitate the addressing of issues that the students have and communicate the same to the concerned authorities.

Womens Empowerment committee:

- Empower and safeguard the rights of female students, faculties and non teaching staff.
- Conducts health awareness programs for female students and faculty members.

Cultural /Music Activities committee:

- Promotes cultural events like Kalavaibhava an inter - college cultural fest, once in two years and Shrusti an intra-college cultural fest conducted every year.
- Motivates the students to participate in the events conducted in other colleges.

Library Committee:

- Specific attention towards requirement proposal given by the individual departments as per the newly introduced course.
- Purchase of new books and other e resources for the use of different Departments

Alumni Committee:

- Coordinates programs organized by the Alumni Association Chapters organizes Alumni meetings at Institute chaired by the Principal and Management representative.

Placement Committee:

- Co-ordinates all the efforts and activities directed towards ensuring utmost satisfaction to the needy students for their placement.
- Organizes training programs such as soft skills and conducts mock interview for the students using Institutional and Industrial expertise.

Internal Quality Assurance Cell:

- To evolve a system for responsive, consistent and catalytic action to improve the academic and administrative performance of the Institution.
- To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

Website/E-Resources Committee:

- Involves in designing and updating the events on the college website.

Examination committee:

* Conducts internal assessment tests and External examinations conducted by VTU.

Magazine/News Letter Committee:

* Collects articles from the students and staffs and publishes in the newsletter after scrutinizing. Publishes college magazine every year.

Student Counselling & Welfare Committee:

* Endeavors to help students educational process to advance their academic as well as personal abilities.

Sports/NSS Committee:

* Organizes training sessions, events for the students to furnish them with the skills needed to participate in the sport or society activities.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.2.3 Implementation of e-governance in areas of operation

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

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: B. Any 4 of the above

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

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

Response:

Under the guidance of the Management, The Principal constitutes various committees for the successful operation of the Institution. The following are different committees of the Institution:

Functional committees of the institution:

Sl. No.	Name of the committees
1	Programme Coordinator Committee
2	Purchase & Budget Committee
3	Grievances Redressal Committee
4	Anti-Ragging Committee
5	Anti-Sexual Harassment Committee
6	SC/ST & OBC Welfare Cell
7	Hostel Development & Welfare Committee
8	Women Empowerment Committee
9	Cultural Committee
10	Library Committee
11	Alumni Committee
12	Placement Committee
13	Internal Quality Assurance Cell
14	Website/E-Resources Committee
15	Examination Committee
16	Magazine/News Letter Committee
17	Student Welfare Committee
18	Sports/NSS Committee

19	Anti-Ragging Squad
20	Anti-Sexual Harassment Squad
21	Industrial Advisory Board

The Institute has staff and student's Grievance Redressal Committee. The committee is headed by the Principal and senior faculties of various departments as members.

Objectives of Grievance Redressal Committee:

- To addresses the Grievances received from the members of the Institution through suggestion box and mails.
- To maintain a pleasant educational atmosphere in the Institute.

Functions of Grievance Redressal Committee:

- The function of the committee is to address the complaints lodged by students, staffs and judge its merit.
- The Grievance Redressal Committee is also given authority to look into matters of harassment.

The committee regularly conduct meetings and address the grievances of the students, teaching and supporting staffs. As a case study a grievances collected from the suggestion box in August 2017 is considered.

- Central circular dated 16/8/2017 has been circulated by the Greviance Redressal Committee to the committee members to collect the sugession dropped in the sugesition box by 18th August.
- Griveance received from SVCE students by requesting one internal assesment test per day.
- The Committee conducted a meeting on the grievance received in the meeting chaired by the Principal and addressed the issue.
- Top priority was given to the grievance received.
- The Principal accepted the request and allowed to conduct one internal test per day.

With effect from the second internals in the month of November 2017.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.3 Faculty Empowerment Strategies

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

Response:

SVCE functions under the Sri Venkateshwara Group of Institutions (SVGI), which is registered under

Societies Act. The Institute is following well framed rules & regulations and ensures the complete transparency in administration. The management has created conducive working atmosphere. The management has implemented number of welfare measures to increase the morale of the staff members. To name a few, the following staff welfare measures are in place.

1   Interest free loan facilities for teaching and non-teaching staff.

2   PF and ESI facilities are provided for non-teaching staff.

3   Free transportation facilities for non-teaching staff

4   Casual Leave (CL)

5   Special Casual Leave (SCL)

6   Emergency Leave (XL)

7   Earned Leave (EL)

8   Permission for Flexible Hours for faculty.

9   Vacation for teaching and non-teaching staff.

10   Financial support for teaching faculties to attend conferences, workshops, etc.

11   Fees concession in SVGI school and colleges for the employees' children.

12   Financial support is also extended for research and filing patents.

File Description	Document
Link for Additional Information	[View Document]()

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

Response: 8.41

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

2018-19	2017-18	2016-17	2015-16	2014-15
14	44	6	7	3

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

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

Response: 11.4

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

2018-19	2017-18	2016-17	2015-16	2014-15
14	27	6	7	3

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

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

Response: 45.23

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

2018-19	2017-18	2016-17	2015-16	2014-15
112	111	92	56	16

File Description	Document
IQAC report summary	[View Document](#)
Details of teachers attending professional development programs during the last five years	[View Document](#)

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

Response:

Quality teaching is imperative for improving student outcomes and achievements. The organization has a well designed performance appraisal system. It is executed with the help of Self Appraisal Reports(SAR) which gives quantitative assessment of the faculty members. The Performance is self assessed by duly filling online SAR in OPTRA with proofs of performance by faculty at the end of academic year. The applications are then evaluated by respective Programme Coordinators and the Principal. The system inspires faculty, which boosts professional knowledge and growth. The faculty appraisal is provided by considering the following parameters:

1. Academic performance
2. Publications in Journals
3. Publications in Conferences
4. Seminars
5. Workshops
6. Faculty Development Programs
7. Research Initiatives – Projects applied for funding
8. Consultancy Activities
9. Student development
10. Department Activity
11. Inter-department Activity
12. Outreach(External Resource Person)
13. Online/ Hands-on Courses certification
14. Industrial visit organized for the students
15. Internship arranged

File Description	Document
Any additional information	[View Document](#)

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Financial documents are the responsibility of Managing Committee of the Society. The responsibility

consisting of the design plan, implementation and upholding the internal control pertinent to the preparation and staging of the financial statements.

A team of chartered accountants conducts external auditing once in a year. The external auditing involves procedures to attain evidence about the funds and disclosures in the financial statements. The procedures adopted depend on the auditor judgement, including the evaluation of the risks of material misstatement. In creating the risk statement the auditor considers internal control pertinent to the preparation and presentation of the financial statement in order to built audit procedures that are suitable for the circumstances. The audit also includes evaluating the correctness of accounting policies used and the sensibleness of the accounting estimates prepared by management as well as the financial statements.

The auditing usually takes three four days calling for complete bank statements analysis, cash vouchers, purchase bills, fixed asset bills and other expenditure bills. It also involves verification of bank loan papers, TDS submitted from the employees and other suppliers to the Income Tax department.

File Description	Document
Link for Additional Information	[View Document](#)

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

Response: 0

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

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

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	[View Document](#)

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

Response:

Sri Venkateshwara College of Engineering is a self-financed Institution. The predominant source of funds for the Institution is student fees which includes tuition fees, college fees, hostel fees and transportation fees collected from the students. In addition to this, the revenue is generated through R & D activities, Consultancy and funds from society. The total intake of Institution at UG level is classified into 3

categories as per the norms of Government, i.e., CET, COMED-K and Management. At present, admission quota is as follows: 45% CET, 30% COMED-K and 25% Management quota. The tuition fees as per the above said admission quota is CET – Rs. 65,340/- and COMEDK- Rs. 1,43,748/-. The Institute has received Research grants of Rs.114.02 lakhs from various research grant agencies.

The institute has a well-defined system to monitor the utilization of available financial resources. Proper utilization of financial resources is planned at the beginning of every financial year and it as follows:

The administrative and heads of various departments are requested to submit the budget required for the financial year and also coordinators of different cells, such as R& D Cell, Examination Cell, Placement Cell, NSS Cell, etc. are instructed to submit their budget proposals to Principal for further process.

The process of purchase is initiated by the purchase committee and includes:

- Accordingly the quotations are called. Comparative statements are prepared with respect to the quality. After the negotiations by purchase committe PO are issued.
- Respective equipments are received from the vendors as per the terms and conditions mentioned in purchase order.
- All transactions will be made through the bills and vouchers monitored by Principal and purchase committee.
- Financial audit is conducted by chartered accountant every financial year to verify the compliance.

File Description	Document
Link for Additional Information	[View Document](#)

6.5 Internal Quality Assurance System

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

Response:

The Internal Quality Assurance Cell (IQAC) was established in the year 2014 to monitor the quality of services provided by the institution to its stakeholders. An IQAC committee is formed and approved by the governing council to take care of Quality assurance strategies and processes. SVCE is committed to continually improve the infrastructure, research initiatives, enhance the faculty competencies and empower the students to self-learning. The IQAC conducts meeting once in every six months to discuss the improvements to be carried out and enables the institution to focus on mission and vision. Parameters related to the enhancing the quality of the Institution like, innovations in teaching, National Board of Accreditation (NBA), Infrastructure development are considerably improved after the formation of IQAC Committee.

IQAC has contributed significantly in the following areas:

- NBA Accreditation.

- QS I-GAUGE rating.
- Expert Committee Visit.
- Ranking.
- MoU with Industries and Institutes.
- Publication of research articles.
- Up gradation of faculty qualification.
- Freshers' induction programme.
- Sponsored Seminar, Workshop, Faculty development programme and Conferences.
- Training and Placement Activities.
- Development and auditing of course file.
- Introduction of QPDS system.
- Training programs to the faculty.
- Participation in smart and clean survey by AICTE.

Three case studies:

1. **NBA Accreditation.**

The IQAC has taken advantage of the opportunities available and moved forward with a high level of optimism. The Institute is offering six Under-Graduate(UG), five Post-Graduate and Six Doctoral Degree programmes. Among which four undergraduate programmes (E&CE, CSE, ME and Civil) are accredited by NBA till 2022 under the guidance of IQAC. The accreditation measures the improvements found in the quality assurance process, in which the respective programmes are analyzed in order to meet the norms and its standards continuously as recommended by AICTE .The NBA accreditation has set a benchmark to promote and recognize excellence in technical educationat UG level. Further this also helps in benefiting the quality improvement process, it also encouraged by the NBA to encourage the superiority in technical education.

2. Introduction of QPDS system.

The IQAC considering the importance of maintaining the quality in the process of generation of Question Paper, and adopted Question Paper Delivery System (QPDS), which is developed by our faculty members. This system has various levels of security making it mostly tampers proof and supposedly tackles the menace of question paper leakage. Our institute has adopted the process in a very systematic way and all the problems have been overcome. The examination committee takes care of the entire process of examination by conducting internal and external examination in time to time as per the schedule. Internal Assessment (IA) tests are directed as per the calendar of events. Complete transparency is ensured in the entire assessment process. QPDS is being used to generate IA question papers 30 minutes before the test. The course instructors evaluate with scheme of evaluation the test books within one week from the date of conduct of test.

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

Response:

The IQAC keep monitoring the institute involvement in preparing responsible engineers for future by providing a highly conducive teaching-learning environment. While implementation the course instructor maps the Course outcomes (CO) & Programme Outcomes (PO), Programme Specific Outcomes (PSO) for each course, prepares the lesson plan and delivers the contents accordingly. All the class rooms are digitalized and equipped with ICT facilities. Contents will be delivered through chalk & talk, power point presentations, model display, role-play, experimentation, video play, industrial visits, internships, projects, technical & cultural fests, seminars and assignments are practiced for improving the teaching learning process. An initial feedback will be obtained from the students to assess the level of teaching and learning. The feedback is used to make the necessary changes in the curriculum delivery.

1. **Implementation of Pedagogical Initiatives and Various Instructional Methods.**

The IQAC takes initiative by monitoring the teaching learning process continuously and Head of the department's report the information to the Principal along with the regular class room lectures by the faculty members the students are exposed to the guest lecture from industrial experts, industrial visit, internship, NPTEL, Group discussion, Q&A session and seminars. The submission of the assignment by the students, discussing content beyond syllabus, conduction of international conference/college fest, institution - industry interaction and collaborative learning motivates the students to understand the concept properly. The contents of workshops conducted are identified with the contents further than the syllabus content which is industry related and this helps in fulfilling the requirements of the students. These discussions carried out by the students helps in identifying the knowledge based on the outcome based education and the industrial requirements, it also further helps in enhancing the skills and making them ready as per the industry needs. The resource persons were experts from the industries and expertize in their domain knowledge such that the knowledge transfer helps in filling the gap between the industry and the academia. The Placement training through online tests helps the students for better placement in various reputed organization. All these outcomes proposed by the IQAC are supported by the management.

2. Execution of mini projects, videos, online certification and encouraging bright/ weak students.

The IQAC has introduced mini projects which are done beyond the syllabus of the university. The students do online certification to enhance their knowledge in their interesting domains and they are very much interactive. Apart from the lectures carried out in class rooms, we also follow a innovative methods for interactive teaching in which we discuss the real time real world problems related to the subject matter by using videos and animations apart from the curriculum content in order to enhance the knowledge in the advanced technologies. As the students see the videos they can visually analyses and this further helps enhancing their thinking capabilities, such that the students can carry out the certification courses of their choice and this further motivate and encourage them to carry out their project work as well. This is well supported by the management and good move from the department's staff members to motivate the students supported and forward by IQAC. The departments encourage the student in their strengths and skills by motivating them to attend GATE and present papers. Low performing students are identified and nurtured by conducting remedial classes and counseling, high performing students are motivated to do still better. Midterm feedback & semester end feedback are obtained through online. These feedback mechanisms are used to further improve the teaching-learning process which is closely monitored by IQAC.

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

Response: 9.8

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

2018-19	2017-18	2016-17	2015-16	2014-15
9	19	12	5	4

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	[View Document](#)
IQAC link	[View Document](#)

6.5.4 Quality assurance initiatives of the institution include:

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

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A. Any 4 of the above

File Description	Document
e-copies of the accreditations and certifications	[View Document](#)
Details of Quality assurance initiatives of the institution	[View Document](#)
Any additional information	[View Document](#)

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

Response:

1. **Accreditation by NBA:** IQAC has set a platform for the improvements in the standards of various departments by guiding them the need of improvements required.
2. **Streamlining of internal examination process:** IQAC initiated the process of QPDS system to set benchmark norms for internal examination.
3. **Preparation for NIRF and QS I-GAUGE:** Structured the complete process are organised the system properly with proper methodology.
4. **Tracing of sponsored research projects and research carried out:** The sponsored research and the research projects with publications in the research field is tracked properly and ensure that funds flow for sponsored research projects are monitored.
5. **Infrastructure facilities:** The growth in the field of infrastructure facilities has been upward for expanding the research requirements.
6. **QRIDES:** The department of QRIDES has been initiated for the research and development.

Funded projects: IQAC has contributed in motivating students and faculties to get funded projects from DST, AICTE, KSCST, VGST, etc.

1. **Organisation and participation of Hackathon:** Students are encouraged to participate in Hackathon conducted by MHRDand the institute has organised Hackathon multiple times.
2. **Analysis of faculty feedback:** Proper feedback formats has been maintained and the analysis is done by IQAC to evaluate the teaching learning process.
3. **Getting digitalized in more number of academic operations:** The institute mainly does all the correspondence through digitised format.
4. **Conduction of sponsored conferences, workshops, seminar and faculty development programme:** The institute gives more attention in organising sponsored and funded events from various other organisations.
5. **Mentor books for students counseling:** Each student has a mentor and they will be monitored on regularly.
6. **Canteen: C**anteen facility is provided with many choices in food and facilitated with app based system.
7. **Alumni collaboration:** Every year alumni interaction is carried out and frequently alumni used to visit the campus and discuss with the students and faculties.
8. **NSS activities:** The institute takes special interest in conduction of social events every year such as blood donation and so on.

The IQAC identifies the best practice and implements the same, year after year at various levels of management and makes sure that the system is well placed to have a better progress in the future.

File Description	Document
Any additional information	[View Document](#)

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response: 12

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

2018-19	2017-18	2016-17	2015-16	2014-15
2	3	3	2	2

File Description	Document
Report of the event	[View Document](#)
List of gender equity promotion programs organized by the institution	[View Document](#)

7.1.2

1. Institution shows gender sensitivity in providing facilities such as:
   1. **Safety and Security**
   2. **Counselling**
   3. **Common Room**

Response:

Sri Venkateshwara College of Engineering gives at most importance to safety and security of its students and employees. The college has very effective counselling procedure and separate common room for boys and girls as it believes in the overall well-being of its students.

a) Safety and Security:

The college has taken the following safety & security measures:

1. A ladies amenities centre inside the campus provides the fundamental facilities for ladies during their stay in the college.
2. In the view of security and safety of girls & boys, a resident lady warden in the ladies' hostel is employed along with a separate resident warden for boys' hostel.
3. CCTV cameras have been fixed in the prominent places like hostel, campus corridors, main campus building and common places.
4. Statutory committees like anti-sexual harassment committee comprising of female faculty members

is constituted as per the AICTE/University guidelines and is working effectively.

5. The Institution has also set up a Women Welfare Committee (WWC) for resolving the issues faced by the girls. The WWC members conduct meetings on the need basis and come up with initiatives like self-defence techniques and awareness about sexual harassment at the work-place.

6. Anti-ragging committee comprising of both male and female faculty visit the boys and girls hostels regularly.

7. Suggestion/complaint boxes are made available at defined locations for the students and faculties to drop in their cause of concern in the form of a written complaint.

b) Counseling:

- The college has a well-defined student counseling system for all the programs starting from the first semester. Each student is allotted with a particular faculty member who will be his/her counselor till the end of his/her course.
- Each faculty has 15 to 20 students to mentoring. This improves the relationship between student and the mentor and helps the mentor to know the overall personality of each student.
- Students meet their mentors for any grievances- regarding gender related issues if any, personal problems, general issues, lack of facilities, academics etc. Counseling helps to boost the student's morale and improve their learning abilities.
- If any serious gender related issue is found, it is recommended to the concerned committee for further action.

c) Common room:

Common rooms for girls are provided in the institute. All the required facilities to relax are provided in the common rooms.

File Description	Document
Any additional information	[View Document](#)

7.1.3 Alternate Energy initiatives such as:

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

Response: 93.41

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

Response: 333696

7.1.3.2 Total annual power requirement (in KWH)

Response: 357225

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	[View Document](#)
Link for Additional Information	[View Document](#)

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 23.42

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

Response: 5.2

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 22.2

File Description	Document
Details of lighting power requirements met through LED bulbs	[View Document](#)
Any additional information	[View Document](#)

7.1.5 Waste Management steps including:
- **Solid waste management**
- **Liquid waste management**
- **E-waste management**

Response:

The Institute is committed to creating an eco-friendly clean and green campus. The institute has a dedicated team of gardeners & sweepers for ensuring proper maintenance of lawns, gardens and plants. The institute has a unique distinction of being a bamboo tree-based campus.

a) Solid waste management:

- The institute has an effective mechanism for waste management. The college canteen provides breakfast, snacks, lunch & dinner. The vegetable waste and left over waste from the hostel and canteen is segregated into bio-degradable and non-bio-degradable waste. This waste is disposed to external agency regularly to keep the campus clean
- The bio-degradable waste is put into a pit and left to ferment which will be used later as fertilizer to plants in the campus. The non-bio-degradable waste is placed into dustbins which are further collected by the municipal authorities.
- The old blue books (IA books) that are used for internal tests are given away for recycling after keeping them for a specified duration in store room. This ensures effective paper recycling which

further aids in fewer trees being cut down.

b) Liquid waste management:

An effective sewage treatment plant functions inside the college. The treated water is recycled and used for watering gardens and lawns. The rain water harvesting unit is also installed in the campus.

c) E-waste management:

The e-waste generated in the Institute are collected together from all departments and handed over to an external e-waste recycling agency.

File Description	Document
Link for Additional Information	[View Document](#)

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

- The Institution has well-designed buildings that takes into account the maximum utilization of natural resources. All the buildings are equipped with rain water harvesting facility that channelizes the rain water into designated open wells.
- There are more than 40 recharg wells to increase the ground water table.
- The bore well of the college campus get replenished due to the rain water storage and also ground water table gets recharged continuously.
- Also awareness programmes are conducted among the students and staff on water conservation is created.

File Description	Document
Link for Additional Information	[View Document](#)

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

Response:

Green practises are one of the important initiatives of the Institute. The Institute tries to go-green in every possible practise. The Institute conduct green audit every year by authorised external agency.

1. Transportation:

- The vehicle movement is restricted inside the campus.
- Faculties and students who reside in the nearby areas commute using public transport and car/bike pools.
- Pitched roads inside the campus serve the purpose of being visually impaired people friendly.
- The college employs 14 college buses covering major areas in the city centre and outskirts of Bangalore for providing transport service for students and staff.
- An exclusive parking lot for vehicles and specific pedestrian friendly roads are available.
- The pedestrian roads have trees on either side which keep the campus atmosphere cool.

2. Solar power plant:

The Institute makes optimum use of the solar energy from the academic year 2018-19 with solar panels being installed on the roof tops of the buildings. The solar energy thus generated is utilised on running the campus with minimal other energy sources. Excess energy is supplied to the grid (BESCOM).

3. Awareness programs:

Go-green initiatives are taken by NSS with emphasis on plastic free campus and planting trees. Students and staff have taken active participation in the government initiatives like Swachh Bharath Abhiyan.

4. Green landscaping with trees and plants:

- A green ambience of the college is maintained with the tree cover that is planted regularly. There is a conscious effort to cover the vacant space in the campus by trees to maintain the green eco-system.
- The college has a unique distinction of being a bamboo trees filled campus. Bamboo trees have the distinction of high consumption of Corbon Dioxide.
- The Institute has a ready to use amphi-theatre and a dedicated team which takes care of planting and maintaining the landscape of the campus with abundant flowering and ornamental plants.
- Various species of birds are spotted in campus.

5. Paperless office:

- Most of the college & department circulars are circulated electronically. Use of emails and social media group messages are effectively used to reduce usage of paper.
- Other initiative like cashless transactions, OPTRA services are being used to communicate the student progress to the parents. Feedback is also taken online which significantly limits paper usage.
- Student monitoring system is done through OPTRA which maintains the personal information, daily attendance, internal marks and other details of the students.
- Electronic messages are sent to the respective parents regarding the any absenteeism from daily classes.

File Description	Document
Link for Additional Information	[View Document](#)

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

Response: 11.86

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

2018-19	2017-18	2016-17	2015-16	2014-15
4.8	356.8	27.28	31.4	39.81

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

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

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

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: B. At least 6 of the above

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

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

Response: 60

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

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

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

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

Response: 25

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

2018-19	2017-18	2016-17	2015-16	2014-15
4	6	6	4	5

File Description	Document
Report of the event	
Any additional information	

7.1.12

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

Response: Yes

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

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

Response: Yes

File Description	Document
Provide URL of website that displays core values	[View Document](#)

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

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	[View Document](#)
Any additional information	[View Document](#)

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

Response: Yes

File Description	Document
Provide link to Courses on Human Values and professional ethics on Institutional website	[View Document](#)

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

Response: Yes

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

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

Response: 30

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

2018-19	2017-18	2016-17	2015-16	2014-15
6	7	6	5	6

File Description	Document
List of activities conducted for promotion of universal values	[View Document](#)
Any additional information	[View Document](#)

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

Response:

Sri Venkateshwara College of Engineering, Bangalore, is a premier technical Institution focusing the overall development of students and Faculty members.

The Institute supports over the years to organize cultural events that brings together knowledge, creativity, entertainment, innovation and physical fitness in all the aspects of faculty and students life.

Every year the institute is organizing **Independence Day** (August 15) and **Republic Day** (January 26).These national festivals are celebrated as a mark of respect to the Nation and to symbolize the unity in diversity among faculty members and students. Every year these National festivals are celebrated by inviting freedom fighter/Army officials. Both faculty and students are actively participating in these events.

On 21st June of every year the **Yoga Day** is celebrated in the Campus in the early morning between 6 am

to 8 am. The yoga experts will train the faculty and students to practice every day and grow into a better human being with a sharp mind, a good heart and a relaxed soul. This yoga day celebration at international level is a vision of our Hon'ble Prime minister Shri. Narendara Modi to recognize India as a land of rich heritage and culture.

From the ancient time in India a high respect is given to Gurus as per Vedas and Puranas. Students organize the **teachers' day** (September 05) every year in the College campus to felicitate the teachers and also to respect a great Teacher and a legend Dr. Sarvepalli Radhakrishna.

Being Premier Technical Institution every year Institute organizes **Engineer's Day** on 15th September. On this day First year students and faculty are visiting Muddenahalli, Chikkaballapur the birth place of Bharat Rathna Shri Mokshagundam Visvesvaraya. Sir M Visvesvaraya was a famous Indian engineer globally recognized and made India to be proud. This will be an inspiration for all young and budding engineers.

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

Response:

The Institution maintains transparency in its financial, academic, administrative and auxiliary functions.

Financial :

- The Purchase committee takes care of the purchases related to the institution.
- Budget plan of all departments is prepared with the involvement of faculties and Heads of the Department.
- A hierarchy is followed in preparing the purchases right from particular lab instructors to the Principal.
- Financial transactions are external audited annually.

Academic :

- Academic decisions are taken in the HOD's meetings and the proceedings are circulated to respective faculty members.
- Institute level events are displayed on the website and departmental calendar events are made known to faculty in advance.
- Regular Class Teacher (CT) and Class Representative (CR) meetings are held as per calendar of events.
- Internal marks & student attendance are displayed on the notice board and are also communicated to the parents through OPTRA.
- Academic auditing is done regularly by IQAC.
- Examination transparency is maintained as per University norms.

Administrative :

- The Institution provides the notification in leading newspapers for filling up the vacant posts.

- Vision, mission, program outcomes, program specific outcomes, events and activities are displayed on college website.
- Transparency is assured while implementing annual increments & promotions and the same is informed to the respective departments.
- Details of all activities/charts/norms/policies are displayed on the website.

Auxiliary Functions :

Before conducting any FDP/SDP/Workshop/Seminar, wide publicity is given in the websites/social media so that all the aspirants from other colleges & society can avail the benefits.

File Description	Document
Any additional information	[View Document](#)

7.2 Best Practices

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

Response:

Title of the Practice 1: Effective Implementation of Outcome Based Education (OBE) in the programmes.

Goal: Objectives of the Practice:

Students studying in Institutions accredited by NBA are certain that they will receive education which is a equilibrium between high academic excellence and professional significance and the requirements of the corporate world are well assimilated into programmes, activities and processes. Since, our Institution is affiliated to Visvesvaraya Technological University (VTU), the Institute follows the course syllabus specified by the University. But a conscious effort has been put in place to inculcate graduating engineers from all programs demonstrate expected skill and competency leading to their global recognition. The expected global attributes were embedded through the Program Outcomes (POs), defined by the National Board of Accreditation (NBA). Hence, all activities on campus (academic, activities beyond curriculum, co-curricular and extra-curricular) are motivated towards developing the POs leading to an effective implementation of OBE.

The Context

The management and academic heads of the college realized the necessity to move from an input based education system towards an OBE and embrace student centric learning system. In this scenario, the first step was the need to define, develop, implement and measure student learning through the attainment of various outcomes: Course Outcomes (COs), Program Outcomes (POs) and Program Specific Outcomes (PSOs). The college has various initiatives both technical and nontechnical which helps in the overall development of the students, especially with regard to skills and attitude in terms of OBE. However, there was need to measure these contribution and development of the student skills.

The Practice

The parameters for accreditation were redefined at the National level in order to embrace OBE and were aligned to meet the minimum expected global standards. Once the need of OBE was recognized, the Institution was put in place in all aspects of student centric learning. Since 2014, the Institution has embarked on the journey of effective implementation of OBE. This expedition of embracing OBE was a collective effort by all direct and indirect stakeholders. This initiative by the institution lead to innovations in the class room by teachers in the delivery methods, participation of students in various content beyond syllabus events, innovation in teaching-learning methods by faculty in assessment tools, thus contributing to the overall development of the student learning. All these were done with a conscious effort in developing the expected program outcomes defined by NBA which in turn would mean that our graduates have global recognition. This value-added competency of the students resulted in heightened student performance both when on campus and after graduation as our alumni.

The initial learning was from the series of training programs conducted by the institute in order to train the faculties to get accustomed to the process of NBA. This was then followed by series of brain storming sessions in individual sessions to comprehend and implement the processes of OBE. The students were also given adequate knowledge about the importance of graduating from a NBA recognized programme. The institute conducted FDP in the domain of OBE, uploaded the OBE content on the college website, delivered invited talks on OBE, the faculties were sent on training programs on NBA preparation and few of the faculties themselves have acted as resource persons in preparing NBA SAR and delivering the lecture on the importance of OBE.

Evidence of Success

Initially 3 programmes of the Institute namely Electronics and Communication Engineering, Computer Science & Engineering and Mechanical Engineering were accredited by the NBA with effect from 01-01-2016. These programmes were again reaccredited by the NBA upto 30th June 2022. Along with these, Civil Engineering program was accredited upto 30th June 2022. Continuous & focused efforts by faculty in truly implementation of OBE was made possible by adopting small innovations in the teaching learning process, assessment tools and ensuring that every student has the expected knowledge, skills and attitude. This was evident in successful implementation of OBE reflected in enhanced student performance.

The following parameters that are considered as evidence towards successful implementation of OBE are:

- Enhanced student project quality and student publications.
- Better professional body activities.
- Enhanced student placements.
- Increased student internships.
- Increased number of student industrial visits and industry-academia collaborations.
- Increased student developments programs/seminars/workshops.
- Continuous improvement in the average and highest pay package offered.
- Increased number of awards secured by students in National and International technical competitions/Professional body activities
- Greater student participation in National and International competitive examinations (GATE/CAT/GRE/TOEFL etc)
- Marginal improvement in number of successful entrepreneurs

Problems Encountered and Resources Required

The management and various academic heads of the departments felt the need adopting student centric learning methods along with OBE and NBA accreditation. Accordingly senior faculty members of various programmes were deputed to training programs conducted on OBE at various places. They also visited previously accredited colleges to know about the procedure. This assisted in the understanding the true essence of OBE, the necessity to consciously plan and develop the POs defined by NBA, together with a requisite to compute the attainment of various outcomes. The senior faculties who were trained then took turn to mentor the remaining faculty members in OBE. Through all these brain storming sessions, the faculty members started adopting various teaching learning methodologies like course seminar, assignments, open ended experiments, mini-projects, internships, industrial visit, concept videos, group activities, etc. Content beyond the syllabus were delivered through events like industrial visits, seminars, workshops and student development programs. All these efforts from the faculties and the active support from the management helped in creating an environment in the institute that is conducive for the overall development of the students as prescribed by the NBA and in effective implementation of OBE.

Title of the Practice 2: Design Thinking Classes and Job Oriented Courses

Goal: The objectives of the practice are:

- To explain the process of design thinking.
- To make the students understand the difference between design thinking and conventional problem-solving skill.
- To provide a social and thinking space for the recognition of innovation challenges and the design of creative solutions.
- To learn the various tools, techniques and templates used in design thinking.
- To apply the tools taught on the real life environment and situations.
- To immerse students into the world of innovation as a systematic process of tackling relevant business and/or social problems.
- To expose the student to state of the art perspectives, ideas, concepts, and solutions related to the design and execution of innovation driven projects using design thinking principles.
- To recognize the latest and future issues and challenges in innovation.
- To introduce career and market-oriented, skills enhancing add-on courses that has utility for job, self-employment and empowerment of the students.
- To help the students in their period of turmoil and confusion.

Context:

The following issues made the Institution to adopt the Design Thinking Practice and Job Oriented Courses (JOC):

- The need to obtain feasible solution for the real-world problems in the current competitive world.
- The need to follow a systematic methodology to draw conclusive inferences in the form of solution.
- The need to increase the life coping skills and employment worthiness of the student.
- The need to develop readiness for choices and to face everyday challenges.
- The need to minimise the mismatching between education and employment.
- The need to create opportunities, space and scope for the development of the talents of the students.

The Practice:

- A Batch of 60 students is allotted to one faculty who has undergone intensive training on Design Thinking Tool and Techniques.
- Design thinking takes the designer's approach to problem-solving and applies it to all contexts and types of problems; it's an extremely powerful technique where design, making and business overlap.
- Small groups are formed in the class to carry out the various activities like identifying opportunity, prototyping, taking feedback from peers and presenting the inferences to the spectators.
- The Design Thinking process is based on the intuitive work-flow process of a designer. The team is led through iterative loops which take the participants through five phases.

1. Understand: In the phase understand the team sets the problem space.
2. Observation: In the phase observation, participants gain an outward view and form empathy for the users and stakeholders.
3. Define the point of view: In the phase, which serves to define the point of view, the knowledge gained will be collated and summarized, and the challenge reframed.
4. Ideation: In the phase of ideation, the team subsequently generates a variety of solution possibilities, then selects a focus.
5. Prototyping: The prototyping phase serves in the development of concrete solutions. These solutions can then be tested on the appropriate target group.

- The collaborative interaction of multi-disciplinary and decision-capable teams, flexible work space for collaborative work and a workflow that follows the DT process.
- For the JOC, a batch of 60 students is allotted to one faculty who has technical expertise in the specific subject.
- The faculty allotted is from an industrial background and teaches the course every week for one hour duration.
- Timings for the JOC is specifically mentioned in the class timetable to avoid any sort of ambiguities.

Evidence of success:

- Design thinking classes have provided opportunities for the students to view a problem from different perspectives.
- Students gain the capability to delve into problems to determine its root cause.
- The class activity encourages innovative thinking and creative problem solving within the students and ensures that the final outcome meets objectives and problem requirements.
- Design Thinking has enabled students to continually expand their knowledge.
- Job oriented courses have raised confidence and given direction through proper skill development.
- Technical expertise among the students has increased due to the JOC..

Problems Encountered and Resources Required

- Initially the students took more time to understand the whole process of Design Thinking. But slowly there was active participation in the class room activity.
- Building a practice of design thinking takes time and considerable effort and often requires cultural change.

- Initially choosing the best JOC was difficult that would cater to the industrial and job requirements.

Title of the Practice 3: Meditation Classes

Goal: The objectives of the practice are:

- To provide a means to all the students seeking spirituality in the Sahaj Marg system of Raja Yoga and to bring them together for meditation.
- To promote a feeling of harmony and mutual brotherhood / sisterhood among all human beings, irrespective of race, religion, caste, colour or gender.
- To help students to become physically fit and mentally healthy and to be focused on issues.
- To bring in sharpness, keenness of attention, awareness and observation and emotional intelligence.
- To unlock the potential of subconscious mind that can be a source of great ideas, inspiration and solutions to problems.
- To access the mind's inner wealth so that we no longer need to depend on outer circumstances for fulfillment and well-being.
- To promote and create human integration – for individuals and for the world.

Context:

The following issues made the Institution to adopt the Meditation Practice.

- The need of the students to be focussed and have a high concentration level in order to cope with the pressure to perform in current competitive world and to face the challenges in the society.
- The need for addressing conflicts in attitudes, habits, and adaptability towards learning practices.
- The need to establish coordination between mind, body and soul.
- The need to assign joint tasks to build team spirit and collaborative learning.
- The need to increase innovation mind-sets among students, harnesses their energy and channels their drive into the things that matter most.
- The need to increase productivity in high-performance situations.
- To need to reduce a sense of isolation and feel connected.

The Practice:

- Meditation sessions are arranged by the mentors in coordination with the respective department teachers.
- A batch of 60 students is allotted to two qualified mentors /experts in Meditation.
- The mentors engage the 1 hour session as per time table by highlighting the significance and benefits of practicing meditation every day.
- Any sort of difficulty in practising the meditation by the students is addressed in the succeeding sessions by the expert.

Evidence of success:

- Concentration levels of the student in the class has significantly improved.
- The peer interaction is strengthened in the classroom and improvement is observed in the Student Teacher relationship.

- Academic performance of the students is improved.
- Curricular/co-curricular activities of the students have improved.
- Mindfulness training has resulted in improved accuracy and higher working memory capacity..
- It has helped to reduce feelings of loneliness and providing a feeling of being connected.
- Decreased symptoms of stress, anxiety and depression

Problems Encountered and Resources Required

- Initially it was a difficult task to engage the students seriously in the meditation process.
- But later due to continuous monitoring of faculty in-charge and motivational talk though stories of successful personalities by the experts, slowly the students realized the importance of meditation and reaped the benefits.

File Description	Document
Link for Additional Information	[View Document](#)

7.3 Institutional Distinctiveness

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

Response:

The Institution has established Centre for **Q**uality assurance, **R**esearch, **I**ndustry Interaction, Incubation, Innovation, **D**evelopment, **E**ntrepreneur Development and **S**ocial Responsibilities (Q-RIDES). There are four major verticals in this centre:

1. Research and Development
2. Incubation
3. Entrepreneur Development.
4. Social Responsibility.

The roles and responsibilities of Q-RIDES are:

- Research
- Interact with Industry representatives to develop student's skills set.
- To enhance the knowledge level of students to achieve better placements.
- To develop Personality Development Programs (PDP) for students.
- Co-ordinate research related works with industries.

Incubation Cell

- The team should identify students who are interested in designing a product and guide them to do patent and publication.
- The team has to help start-up companies to develop by providing services such as management

- training, marketing, finance and office space.
- The team should prepare an eco-system for the incubates to innovate new product.

Entrepreneurship Cell

- To foster linkages between parent institution, industries and R&D institutions,
- To catalyze and promote development of Science & Technology based enterprises and promote employment opportunities
- To respond effectively to the emerging challenges and opportunities both at National and International levels relating to MSME.

Industry-Institute Interaction

- To reduce the gap between industry and academia, the team will interacts with various industries.

Social Responsibility

- The Center for Q-RIDES guides the students to provide innovative solutions for social problems.
- This will lead to scalable and sustainable enterprises having a social and economic impact.

Consultancy

- The Center for Q-RIDES provides consultancy services to various Institutes and Industries based on the need.
- The Team Q-RIDES have experienced and dedicated certified trainers for various trainings like NBA & OBE.

Training

- Team Q-RIDES Training Division focused on enriching the Skills of the students in various aspects apart from regular curriculum which includes Design Thinking, Value Added Course etc.

Facts and Figures

- Number of researchers: 15
- Clients: 6
- Industry Institution Interactions: 30

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

5. CONCLUSION

Additional Information :

- Individual departments have their own department library along with main library to facilitate books for students and faculty.
- Important information's/messages communicated to the students and faculty through digital display at prominent locations.
- For various online examinations of MNC's, GATE, Government sectors, etc, our Institution has been identified as nodal centre.
- ATM facility is available within the campus.
- The Institute has provided good hygiene canteen facility of area 743.90 sq. mtrs. And height of 9.14 mtrs (30 feet) for students and faculty members.
- Print Journals are subscribed in all departments such as Journal of Computer Science, Indian Journal Computer and Internet Security, Indian journal of Information Science and Education, International Journal of Information Technology Engineering, Journal of Structural Engineering, International Journal of Civil Engineering and Application, Journal of Manufacturing Engineering, International Journal of Mechanical Engineering, Indian Journal of Advanced in Communication Engineering, International Journal of Electronics Engineering and Embedded System, etc
- Online Journals like Elsevier, Springer Nature, Taylor and Francis, Institution of Civil Engineers, Emerald, Mcgraw Hill Education, New age International, Packt, Knimbus. Turnitin, Net Analytics are subscribed
- The Institution has organised many classical musical events in association with SPIC MACAY where renowned artists such as Padma Vibushan Awardee Sri. Hariprasad Chaurasia and many more performed and mesmerized the audience with their fabulus music.
- And the free training on skills for the rurul people are the common practise by the Institution. The institution organized seven International and six National conferences in past 5 years. More than 40 student projects are supported by KSCST/KSBDB.
- AICTE sponsored career counseling programme, **PRERANA** for SC/ST students is being organized in 2019-20.
- Over 12 Civil Engineering Students have actively participated and awarded at various levels and events. A group of Mechanical Engineering Students have developed onion harvesting machine to ease the effort of farmers. This has won outstanding awards at various events in Bengaluru and also at Pune.
- More than 36 Mechanical Engineerting students participated at various level project exhibition, poster presentaion competitions and won awards.
- Computer Science & Engineering graduating students have participated in KSTA sponsored project exhibition.

Concluding Remarks :

Sustaining quality in technical education sector plays vital role. It is our prime responsibility to shape the future of our upcoming generations through continuous monitoring and upgrading the education system as per the changing needs of industries.

Our Institute is dedicated to promote creativity and innovation among the students by sharpening their critical thinking skills upon developing their intellectual ability to make them ready for the Industry along with the

social concern. Our alumni have spread across the globe serving at various positions in reputed organizations.

Four Programmes have been accredited by NBA, has rated gold band by QS I-gauge and trying its best to get listed in NIRF ranking. At present our priority is to get accredited by NAAC and planning to become autonomous Institute. It enables us to frame the academic syllabus as per the needs of industry and to bridge the gap between industry and academia which will make our students more competitive and employable.

The Institution is continuously striving to contribute the best to the society & the nation by creating high caliber, talented young work force.