

FOR 2nd CYCLE OF ACCREDITATION

K.S.R. COLLEGE OF ENGINEERING

K.S.R. KALVI NAGAR, THOKKAVADI (PO), NAMAKKAL (DT). 637215 www.ksrce.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

August 2022

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

K.S.R. College of Engineering (KSRCE) is located at Thokkavadi, Tiruchengode, Namakkal District, Tamil Nadu. The Institution was established in the year 2001 by Lion Dr. K.S. Rangasamy, Founder Chairman and his son Shri. R. Srinivasan, Chairman cum Managing Trustee. It is a self financing Engineering college spread over 29.8 acres lush green sprawling campus. KSRCE has been approved by All India Council for Technical Education (AICTE), affiliated to Anna University, Chennai and conferred Autonomous Status by UGC in the year 2012. The Institution is recognized under section 2(f) and 12(B) status by UGC. Presently, two Under Graduate Programmes namely, B.E.(Electronics and Communication Engineering) and B.E. (Computer Science and Engineering) were accredited by National Board of Accreditation under Tier I, SARs are submitted to NBA accreditation for the programmes B.E. (Mechanical Engineering), B.E. (Electrical and Electronics Engineering), B.E. (Automobile Engineering) and Master of Business Administration.

KSRCE has been accredited by the National Assessment and Accreditation Council (NAAC) with 'A-Grade' with effect from 08th June 2017. The Institution is participating in National Institute Ranking Framework and listed in the band width of 151-200 in (NIRF-2017). KSRCE has signed Memorandum of Understanding (MoUs) with various Premier Industries and Higher Educational Institutions.

The Institution has completed 21 years, and offers 8 Under Graduate and 9 Post Graduate including MBA and MCA programmes. All the Departments are adhering to research culture, we have approved Research Centers and Supervisors.

Vision

Vision of the Institution

• We envision to achieve status as an excellent Educational Institution in the global knowledge hub, making self-learners, experts, ethical and responsible engineers, technologists, scientists, managers, administrators and entrepreneurs who will significantly contribute to research and environment friendly sustainable growth of the nation and the world.

Mission

Mission of the Institution

- To inculcate in the students self-learning abilities that enable them to become competitive and considerate engineers, technologists, scientists, managers, administrators and entrepreneurs by diligently imparting the best of education, nurturing environmental and social needs
- To foster and maintain a mutually beneficial partnership with global industries and Institutions through knowledge sharing, collaborative research and innovation.

Page 2/130 30-11-2022 05:44:10

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Well established autonomous institution with 21 years of academic excellence
- Recognized by UGC under section 2(f) and 12(B)
- Accredited by NAAC with A grade with effect from 08th June 2017
- Flexible and highly supportive Management
- Highly experienced and qualified faculty with high retention rate
- Highly skilled and experienced supporting staff
- Good placement records
- Conducive learning environment in a tranquil, clean and lush green campus
- Excellent infra-structure, Laboratories and research facilities
- In-built facility for co-curricular activities
- Industry supported value added courses
- Professional Society Chapters for every department
- Seven departments are recognized as Research Centres by Anna University
- Centres of Excellence in collaborations with Virtusa, Aspire Systems, Wipro, L&T and infotech
- Industry trained faculty with Certifications from Virtusa, Wipro and Infosys Campus connect
- Internet Band width of 280 MBPS
- Seed money to promote Research and Development activities
- Effective Mentor-mentee system
- Memorandum of Understanding with reputed industries and Higher Education Institutions.
- Exquisite facilities for sports and cultural activities
- National Service Scheme (N.S.S.) and National Cadet Crops (N.C.C.) to promote social responsibility
- Well furnished hostel facilities for boys and girls
- Multi cuisine food courts
- Hospital facility inside the campus for the students and faculty
- Community FM radio to create social awareness.

Institutional Weakness

- Institution located in rural area and most of students are first generation graduates
- Limited Research Funding from Industries and Funding Agencies
- Limited students enrollment from Urban areas, other states and countries
- International Collaboration

Institutional Opportunity

- Faculty contribution in research and consultancy
- Promoting new start-up and entrepreneurship programmes
- Establishing Incubation Centre
- Scope for Industry Institute Interaction
- Increasing the number of UG & PG programmes
- Collaboration with Sister and other Institutions for inter disciplinary research activities
- Strengthen Alumni engagements and generate endowment funds

• Designing curriculum to meet industry needs

Institutional Challenge

- Developing communication skills among the students
- Reduction in students enrollment for engineering programmes
- Meeting the industries demand and expectations in terms of emerging technologies
- Providing 100% placement to the students
- To promote the students to pursue higher studies and competitive examination
- Limited admission to PG Courses
- Consultancy and Development projects from Industries
- Entry of Private and Foreign Universities

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The curriculum of KSRCE is based on Outcome Based Education focused on vision, mission, graduate attributes, PEOs, POs and PSOs. The curriculum also addresses the local, national and global needs. Relevant courses are included to foster employability, entrepreneurship and skill development. The Choice Based Credit System is implemented in all UG and PG Programmes. Provision is provided for open/Interdisciplinary electives, online courses through SWAYAM/NPTEL and Internship. Courses on life skills such as Universal Human Values (UHV), Professional Ethics and Environment and Sustainability are included into the curriculum.

Curriculum Revision

Curriculum is revised periodically considering the feedback from all stakeholders, namely, faculty, students, alumni, employers, parents and academicians. The feedback is exclusively obtained for curriculum revision. Course wise survey is collected from all students at the end of every semester in online. The PAC reviews and summarises the views of all the stakeholders. The PAC in consultation with the faculty formulates the draft curriculum and syllabi. It's then discussed in the BoS meeting for their views and modification.

Focus on Employability, Entrepreneurship and skill development

All courses in the curriculam have focus on employability, entrepreneurship and skill development. The skill development initiatives assume importance and focus on National Education policy. Career Competency Development is a non-credit course introduced to improve the analytical and communication skills, to facilitate the students for placement.

The Curriculum provides inter-disciplinary courses, open elective/online courses under choice based credit system. Eventhough the curriculum and syllabi are updated regularly, Value added and life skills courses are

also offered. Activities and programmes are conducted to sensitize the cross cutting issues, gender equality, and sustainability, human values to inculcate divergent competencies.

Student Enrolment

KSRCE admissions are based on the Reservation Policy of the Government of Tamil Nadu. As per the norms 65% of sanctioned strength, of the students are admitted through online Counselling by the Directorate of Technical Education, and seats are allotted following the Reservation Policy. Under Management quota 35% of sanctioned strength is admitted through a transparent admission process. Differently abled, outstanding sports persons and economically backward students are admitted by the management under a special quota.

Teaching-learning and Evaluation

KSRCE has adopted the outcome based education for its teaching, learning and evaluation. Teaching and learning process include, experiential learning (field & Industry visits and Industry oriented Courses), Activity based learning (interactive sessions, Group discussion, mini projects) and participative learning (practical assignments, projects, quizzes, hackathon etc.

Learning levels of the students are assessed individually, course wise and overall-considering all courses. Advanced learners are provided support to participate in various curricular, co-curricular activities, hackathons, International/National level project competitions, undergo fast track course completion in seventh semester enabling full time project/internship in companies. They are also motivated to undergo advance courses on AI, IOT, Data Analysis, Green Energy and Automation. Slow learners are identified, counselled by mentors, provided additional coaching, assignments, tests by the course faculty and their progress is continuously monitored and follow up actions are taken.

The gaps between the teaching learning process and the expected outcomes are identified and accordingly various student-centric teaching & learning are proposed to improve the participation of the students in the learning process.

Academic Calendar is prepared before the commencement of the academic year. This contains the semester working days, schedule of all curricular activities including continuous assessment tests and end semester examinations. Faculty prepare the lesson plan as per the calendar.

Learning outcomes (COs) are formulated for all courses and printed in syllabus copies. The COs helps faculty and students to learn the objectives and outcomes of each course and the programme. Students are assessed for COs through assignments, tutorials, Continuous assessment tests, Quizzes and end semester examinations. The knowledge level of the questions are indicated in the question papers. The attainment levels of COs are calculated, analysed and actions are taken for further improvement.

Research, Innovations and Extension

KSRCE takes measures and puts in all efforts to make research, innovation and extension as an integral part of the institution. Quality of education depends sharing of knowledge gained through research and innovations. The institution has formulated well defined research policy and implemented, through the Research Advisory Committee (RAC).

The institution motivates faculty and students to carry out research in their desired field of interest as well as the frontier areas of technology. A notable number of faculties are pursuing Ph.Ds. A special Ph.D. allowances are granted on completion of Ph.D.

Faculty is continuously encouraged to submit Research Project proposals to various funding agencies and industries. Financial supports are given to prepare the proposals and presentations. Faculty is empowered to write project proposals by way of organizing workshops. The institution has signed MoU with industries for Research projects.

All our faculty members are involved in research, Innovations and extension activities.

Infrastructure and Learning Resources

KSRCE campus is spread over 29.8 acres of land with lush green environment. It has 5 academic blocks with a built up area of 42,146 sq.m It has adequate infrastructural facilities in terms of class rooms (60), well equipped laboratories (66), Digital library, Smart class rooms (10), seminar and tutorial hall (15) to conduct all kinds of academic activities. The entire campus is Wi-Fi enabled; all classrooms are provided with ICT facilities and LCD projectors.

The institution has "Institutions' Innovation Council (IIC)" supported by Ministry of Education to promote innovation, start ups and entrepreneurship ecosystem. Centres of excellence and industry supported laboratories are set up for advance learning. The Campus Training and Placement Cell impart soft skills and Technical Training to facilitate placements. Separate hostels are available for boys and girls with a occupancy capacity of 620 and 180 respectively.

The library is located with an area of 1215 sq.m and the digital library has an area of 118 sq.m. Sufficient numbers of systems are provided in the digital library section with internet facility to access the e-resources. The institution allocates funds for the purchase of books, e-books and subscriptions to Journals/e-journals. The average expenses for books, e-books, and subscription for journals/e-journals is Rs.26.38 lakhs over last five years. The daily usage of library by faculty and students exceeds 18.37%.

The institution provides computing facilities in all departments. There are 1206 number of systems and 4 main servers. Firewall is provided to achieve campus network security. In addition, all faculties are provided systems with internet connectivity.

The maintenance of physical, academic and support facilities are carried out by the respective departments through the estate officer/ housekeeping staff with an average budget of 74.48 lakhs.

Student Support and Progression

The institution takes care of student support system for their empowerment and Skill development through various measures by following the inclusive practices.

The institution ensures the prompt application schedule and payment of SC/ST/OBC scholarships provided by the State and Central Governments. The Socio-economically weaker sections and differently abled students are provided with financial assistance through fee concession and scholarships. Meritorious students are also offered merit scholarships. Students are facilitated to apply for scholarship offered by NGOs.

The institution also conducts programmes and facilitates for GATE, CAT, GRE, IELTs and Public Service examinations. Programmes on Soft Skills, Language and communication Skills, Life Skills and awareness of Trends in technology are arranged regularly.

Training and Placement Cell empowers the students on a regular basis to be job ready through intensive career development programmes. The Placement cell bridges the gap between academics and employability skills of the students and provides suitable employment opportunities. Career Counselling also offered for needy students.

The institution has excellent facilities for sports and cultural activities. The Cultural and Sports Committees cater to their personal values like leadership, comaradeshib, sportsmanship and celebration of togetherness. Several co-curricular, extra-curricular and sports activities are being conducted to facilitate holistic development of the students personality and emerge as a socially matured individual.

The Internal compliance Cell monitors gender menaces in any form and is quick to adopt measures in gender sensitization and abolishment of sexual harassment. The Anti ragging Committee ensures a ragging free campus and directly take up issues and bring out a speedy resolution of the same.

The institution has an active Alumni Association which is register under Tamil Nadu Societies Registration Act, 1975 (Reg. No. 4359). The alumni contribute both financial and non-financial support to the institution and offers mentoring for the current students. They are actively involved in various events as resource persons, judges or facilitators for extracurricular activities.

Governance, Leadership and Management

The leadership of the institution follows from the qualities, dedication and involvement of the founder of the institution Lion Dr. K. S. Rangasamy a well known philanthropist, who hails from an agricultural family. In addition to agriculture, he started doing business in distributing milk to societies. In due Course, he concentrated on textile business through a fleet of power looms and developed textile mills Pvt.Ltd. and KSR exports. He has dedicated his life to the noble cause of education in the rural area. Following his foot prints, Mr. R. Srinivasan the second son of him now steers the institution to a greater heights.

The Principal is the head and responsible for both academic activities and administration of the institution. He is empowered by the Governing Council and the management to plan, execute and review the operational part of all activities and committees of the institutions.

The institution has a long term and short term strategic perspective plan for continuous improvement and to progress ahead towards the realization of its vision and mission.

The institution has constituted various development cells to engage faculty and make them to contribute for the growth of the institution as well as to enhance their professional competence. Faculty are provided financial support to attend conferences, workshops and membership fee of professional bodies.

IQAC conducts regular internal and external financial and academic audits. IQAC formulates activities for enriching faculty in the key areas of teaching, assessment, research, professionalism, and administration.

Institutional Values and Best Practices

KSR College of Engineering, over a period of time evolved values and best practices and continue to improve upon towards achieving, wholesome development of students and faculty. The institution has conducted gender equality programmes under women empowerment cell every year to ensure their well being, safety, and security. They are being counselled for their specific problems by internal and external mentors.

The institution has policies towards green campus, and accordingly best possible steps are taken and maintained in managing solid wastes, liquid wastes, bio-medical wastes and e-wastes. The practices adopted to maintain waste management are eco-friendly, economically sustainable and as per the norms. Initiatives are taken against use of plastics through alternative practices. The students are made aware of these best practices through field visits, and addressed about its importance for sustainable environment. All necessary measures are taken to harvest the rain water across the campus.

As per green campus policy, towards conservation of energy, the institution has installed solar power panels, automatic street light, water level and power factor correction controllers, use of LED bulbs and energy efficient equipment.

The institution has provided lift, ramps, wash room for the comfort of differently abled students. They are being counselled to overcome their difficulties. Awareness programmes, workshops, training programmes, are organized to inculcate the importance of eco-friendly environment. Students are involved in conducting awareness campaigns to local community on health, environment, Road Safety etc..

KSR College of Engineering has a specific code of conduct for students, faculty and staff and they are monitored for its adherence. The institution inculcates, Universal human values, Professional ethics, Constitutional Obligations, rights and duties by offering courses as a part of the curriculum.

The institution is functioning as per the prescribed statutory norms. The Governing Council, exercises its responsibilities and empowers various committees for smooth running of the institution, through

decentralization. promote quality	The institution education.	has best	t practices	in all it	s activities	to ensure	overall	development,	and

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College			
Name	K.S.R. COLLEGE OF ENGINEERING		
Address	K.S.R. Kalvi Nagar, Thokkavadi (PO), Namakkal (Dt).		
City	Tiruchengode		
State	Tamil Nadu		
Pin	637215		
Website	www.ksrce.ac.in		

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	P. Senthilkumar	04288-274213	9994595475	04288-27475 7	principal@ksrce.ac
IQAC / CIQA coordinator	R.V.M. Rangarajan	04288-274741	9865541428	04288-27475 7	rangarajan.rvm@g mail.com

Status of the Institution		
Institution Status	Private and Self Financing	

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Recognized Minority institution		
If it is a recognized minroity institution	No	

Establishment Details			
Date of Establishment, Prior to the Grant of	02-07-2001		
'Autonomy'			

Page 10/130 30-11-2022 05:44:10

Date of grant of 'Autonomy' to the College by UGC | 11-10-2018

University to which the college is affiliated					
State University name Document					
Tamil Nadu Anna University <u>View Document</u>					

Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC	27-05-2006	View Document		
12B of UGC	15-12-2015	View Document		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)						
Statutory Regulatory Authority Recognition/App roval details Inst itution/Departme nt programme Recognition/App Day,Month and year(dd-mm-yyyy) Remarks months						
AICTE	View Document	03-07-2021	12			

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

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	K.S.R. Kalvi Nagar, Thokkavadi (PO), Namakkal (Dt).	Rural	29.8	53654	

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)									
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted			
UG	BE,Automob ile Engineering	48	A pass in H.Sc. or its Equivalent	English	30	12			
UG	BE,Civil Engineering	48	A pass in H.Sc. or its Equivalent	English	30	24			
UG	BE,Compute r Science And Engineering	48	A pass in H.Sc. or its Equivalent	English	120	126			
UG	BE,Electroni cs And Com munication Engineering	48	A pass in H.Sc. or its Equivalent	English	90	94			
UG	BE,Electrical And Electronics Engineering	48	A pass in H.Sc. or its Equivalent	English	60	55			
UG	BTech,Infor mation Technology	48	A pass in H.Sc. or its Equivalent	English	60	63			
UG	BE,Mechani cal Engineering	48	A pass in H.Sc. or its Equivalent	English	60	32			
UG	BE,Safety And Fire Engineering	48	A pass in H.Sc. or its Equivalent	English	30	13			
PG	ME,Civil Engineering	24	Passed in Bachelors Degree or equivalent in the relevant field	English	18	18			
PG	ME,Civil Engineering	24	Passed in Bachelors Degree or	English	12	12			

			equivalent in the relevant field			
PG	ME,Comput er Science And Engineering	24	Passed in Bachelors Degree or equivalent in the relevant field	English	6	6
PG	ME,Electron ics And Com munication Engineering	24	Passed in Bachelors Degree or equivalent in the relevant field	English	6	6
PG	ME,Electrica 1 And Electronics Engineering	24	Passed in Bachelors Degree or equivalent in the relevant field	English	6	5
PG	Mtech,Information Technology	24	Passed in Bachelors Degree or equivalent in the relevant field	English	6	6
PG	ME,Mechani cal Engineering	24	Passed in Bachelors Degree or equivalent in the relevant field	English	18	18
PG	MBA,Master Of Business Administrati on	24	Passed in Bachelors Degree of minimum three years duration	English	60	60
PG	MCA,Master Of Computer Applications	24	Passed B.C.A. B.Sc. Computer Science	English	60	60

			B.Sc. IT B.E. CSE B.Tech. CSE B.E. IT B.TECH. IT or Equivalent Degree			
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	60	Passed in Master Degree or equivalent in the relevant field	English	6	6
Doctoral (Ph.D)	PhD or DPhi 1,Computer Science And Engineering	60	Passed in Master Degree or equivalent in the relevant field	English	5	5
Doctoral (Ph.D)	PhD or DPhi 1,Electronics And Commu nication Engineering	60	Passed in Master Degree or equivalent in the relevant field	English	1	1
Doctoral (Ph.D)	PhD or DPhi 1,Electrical And Electronics Engineering	60	Passed in Master Degree or equivalent in the relevant field	English	5	5
Doctoral (Ph.D)	PhD or DPhi 1,Information Technology	60	Passed in Master Degree or equivalent in the relevant field	English	4	4
Doctoral (Ph.D)	PhD or DPhi l,Mechanical Engineering	60	Passed in Master Degree or equivalent in the relevant field	English	2	2

Doctoral	PhD or	60	Passed in	English	1	0	
(Ph.D)	DPhil,Physic		Master				
	S		Degree or				
			equivalent in				
			the relevant				
			field				
						1	

Position Details of Faculty & Staff in the College

				Tea	aching	Faculty	7					
	Profe	essor			Assoc	Associate Professor			Assis	Assistant Professor		
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0			1	0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				28				41				141
Recruited	20	8	0	28	29	12	0	41	105	36	0	141
Yet to Recruit		1	1	0			1	0			1	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				47
Recruited	31	16	0	47
Yet to Recruit				0

		Technical St	aff	
	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				100
Recruited	50	50	0	100
Yet to Recruit				0

Qualification Details of the Teaching Staff

				Perman	ent Teach	iers				
Highest Professor Qualificatio			Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	20	8	0	15	9	0	15	7	0	74
M.Phil.	0	0	0	5	1	0	10	8	0	24
PG	0	0	0	9	2	0	80	21	0	112
UG	0	0	0	0	0	0	0	0	0	0

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

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

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty	Male	Female	Others	Total
engaged with the college?	5	2	0	7

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	336	2	0	0	338
	Female	80	1	0	0	81
	Others	0	0	0	0	0
PG	Male	152	0	0	0	152
	Female	39	0	0	0	39
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	16	0	0	0	16
	Female	7	0	0	0	7
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	57	28	24	26
	Female	6	11	6	10
	Others	0	0	0	0
ST	Male	1	0	0	1
	Female	0	0	1	0
	Others	0	0	0	0
OBC	Male	584	458	403	552
	Female	105	88	101	181
	Others	0	0	0	0
General	Male	12	13	12	18
	Female	5	2	2	6
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

770

600

549

794

Total

Department Name	Upload Report
Automobile Engineering	<u>View Document</u>
Civil Engineering	View Document
Computer Science And Engineering	View Document
Electrical And Electronics Engineering	<u>View Document</u>
Electronics And Communication Engineering	View Document
Information Technology	View Document
Master Of Business Administration	<u>View Document</u>
Master Of Computer Applications	View Document
Mechanical Engineering	View Document
Physics	<u>View Document</u>
Safety And Fire Engineering	<u>View Document</u>

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	As per NEP 2020 guidelines, multidisciplinary and
---	---

interdisciplinary courses are available in this institution. • Accordingly, the vision of the institution consists of "global knowledge hub, self learners, experts, ethical and responsible citizen which will significantly contribute to research and environment friendly sustainable growth of the nation and the world". • Humanities and science with STEM courses such as Universal human values, Professional ethics, Organizational behaviour, Nano-technology, Physics, Chemistry, Mathematics, food and biosafety, Chemical process safety, computer aided manufacturing, Computer aided design, computer applications in management, Cyber Security, Internet of Things, Data Sciences, Network Programming, Artificial Intelligence, Cloud computing, Basics of Electrical and Electronics Engineering, Mechatronics, Numerical methods, statistics, NCC etc., are integrated in the curriculum. • Flexible and innovative curriculum that includes 1, 3 and 4 credit courses such as Environmental science and Engineering, Disaster management, Environmental Impact Assessment, mini project, project phase I and Project phase II are followed in this institution for the holistic and multidisciplinary education. • The

institution has flexible curriculum which supports multiple entry and exist during 1st, 2nd and 3rd year of their Under Graduate studies. • Students are involved in multidisciplinary research projects to find solutions to cross cutting issues and challenges of society consist of local, regional, national and across the world. • Choice Based Credit System/Open Electives are offered in the curriculum to promote multidisciplinary/interdisciplinary approach.

2. Academic bank of credits (ABC):

As per NEP 2020, Academic Bank of Credits (ABC) has been registered by our Institution. • A login id has been created in accordance with National Academic Depository (NAD); an online store house of all academic records. This helps the institution to move towards ABC. It also helps students for multiple entries and exit during their studies. • MoUs are signed with foreign universities for internationalization of education. Credit Transfer system helps the students to transfer between institutions. • Faculty are encouraged to refer Local, National and International needs of society. Faculty also refer syllabus and curriculum of National and International Institutions. • A Faculty meeting is conducted before every Board of Studies and faculty's opinion is sought regarding curriculum, syllabus, textbook, reading materials, assignments, assessments and pedagogical approaches. • The students benefited through multiple entry and exit system are given below; 1. Deepa V, Reg. No. 17102008 got entry from Vivekanandha College of Engineering for Women (Autonomous) transferred to KSR College of Engineering. 2. Kunguma Ishwarya S, Reg. No.: 1913049, KSR College of Engineering transferred to Meenakshi Sundararajan Engineering College, Chennai.

3. Skill development:

The institution has taken initiatives to strengthen the vocational education and soft skills training from the first semester in accordance with the National Skills Qualification Framework. • One credit courses, Value added courses are introduced in the main stream of the curriculum. • To promote value-based education, courses on Yoga, Indian constitutional acts, ethical values, Induction programme on Universal Human Values (UHV) and life skills are integrated in the curriculum. • Curriculum has been updated with the employability courses to promote vocational stream with the support of industry experts

	• To promote Skills, Institution has been organizing PMKVY Scheme to enhance knowledge of employability skill among the students. • The following skill development practices enhances the quality of students; (i) Career Development Skills and LSRW training (ii) options to learn foreign languages like German and French through self learning software (iii) Courses related to problem solving methods and (iv) activities through various clubs.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	• In general, teaching-learning methods of this institution is in English. However, local and regional languages such as Tamil, Telugu and Hindi are used for needy students to make them better understanding of the courses. • Indian arts, culture and traditions are encouraged through cultural activities and music club to emphasize Indian knowledge system.
5. Focus on Outcome based education (OBE):	This institution has introduced Outcome Based Education (OBE) and Choice Based Credit System (CBCS) in the year 2016. • The syllabus has been developed to focus on the course outcomes (COs) for the attainment of programme outcomes (POs). • The best practices adopted for effective implementation of outcome based education are curriculum design, curriculum development, teaching and learning methods, assessment, continuous quality improvement (CQI) and monitoring.
6. Distance education/online education:	• In this institution, importance are given for offline and online education. We encourage the faculty and students to take online courses offered by NPTEL and SWAYAM platforms to enhance in-depth knowledge in the emerging areas. Students are encouraged to attend National and International Online certification courses.

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2021-22	2020-21	2019-20	2018-19	2017-18
17	18	16	16	20

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

1.2

Number of departments offering academic programmes

Response: 10

2 Students

2.1

Number of students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2245	2125	2417	2818	3508

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

2.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
488	724	810	1065	1127

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

2.3

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

2021-22	2020-21	2019-20	2018-19	2017-18
2182	2042	2280	2682	3327

File Description	Document
Institutional data in prescribed format	View Document

2.4

Number of revaluation applications year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
16	8	131	135	147

3 Teachers

3.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
640	641	648	635	591

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

3.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
204	227	192	225	326

File Description	Document
Institutional data in prescribed format	View Document

3.3

Number of sanctioned posts year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
204	227	192	225	326

File Description	Document
Institutional data in prescribed format	View Document

4 Institution

4.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
1094	765	895	666	977

File Description	Document
Institutional data in prescribed format	View Document

4.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
465	661	626	709	840

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

4.3

Total number of classrooms and seminar halls

Response: 95

4.4

Total number of computers in the campus for academic purpose

Response: 1206

Page 25/130 30-11-2022 05:44:11

4.5

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

2021-22	2020-21	2019-20	2018-19	2017-18
204.12	215.17	393.59	487.98	531.81

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

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

Response:

GENERAL

K.S.R. College of Engineering (KSRCE) was established in the year 2001 and providing quality education through 8 under graduate, 9 post graduate and 8 Phd research programmes. The design and development of curriculum and syllabus are based on the programme outcomes (POs) and programme specific outcomes (PSOs) designed based on the graduate profile (knowledge-skill-attitude) recomended by profesional bodies such as ASME, ASCE, SAE, IEEE, ISA, CSI, ACM, ACS and SDC focusing on local, regional, national and global societial needs. The course outcomes (COs) satisfy the needs of POs and PSOs. This outcome based education (OBE) system helps the institution to produce self learners, experts, ethical and responsible engineers, technologists, scientists, managers, administrators and entrepreneurs through its innovative curriculum, syllabus and teaching-learning methods.

Process of Curriculum Development

The AICTE (model curriculum), UGC, Anna University, Outcome Based Education (OBE), national and international priemier institutions curriculum, feedback of stakeholders namely students, faculty, employers, alumni and academic experts are considered for curriculum development. The curriculum, syllabi and course outcomes are prepared by the department faculty and put forth before the department advisory committee (DAC), programmee assessment committee (PAC), board of studies (BoS), standing committee (SC), academic council (AC), governing council (GC) for its approval and implementation.

Curriculum Components

The curriculum consists of basic sciences, humanities, inter disciplinary and multi disciplinary - core courses, core electives, open electives, and mandatory courses such as constitution of india, human values, professional ethics, student skill development (SSD), NCC, Communication skills (speak english culture), carrier development skills (CDS), british english course (BEC), Foriegn language courses such as Japanese/german, online courses such as NPTEL and SWAYAM to enhance the multi disciplinary holistic development of students.

Revision of Curriculum

The curriculum is periodically revised based on the stakeholders feedback and the developments in emerging areas. The regulation and curriculum of various programme were developed in the year 2012 and revised once in four years and based on needs. However, the syllabus are revised, improved and implemented once in six months based on the suggestions of Board of Studies members.

Page 27/130 30-11-2022 05:44:11

Choice Based Credit System (CBCS)

Choice Based Credit System is followed in all the programme of this institution. Open electives/industry supported courses are offered to improve the domain skills. One or two elective courses in the curriculum are waived off for students clearing online courses through NPTEL/SWAYAM or courses/self study courses of 3 credits and such students are excempted from studying elective courses in 7th/8th semester.

Employability, Entrepreneurship and Soft Skill Courses

The curriculum consists of courses for improving the employability, entrepreneurship and soft skill of students. Courses on career development skill (CDS)/human values/entrepreneurship/universal human values/invention labs such as incubation, innovation, start-ups and entrepreneurship/IIT Madras - PALS and research park tie-ups to enhance the employability, entrepreneurship, soft/research skill of students.

Curriculum Enrichment

The curriculum is enriched through incubation, innovation, invention, internship, inplant training, industrial visit, mini projects, industrial guest lectures, start-ups, symposium, seminars, workshops, value added courses, Yoga, NSS, RRC, YRC and various student clubs.

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

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

Response: 100

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

Response: 17

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

Response: 17

Page 28/130

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

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

Response: 82.34

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

2021-22	2020-21	2019-20	2018-19	2017-18
545	456	578	588	435

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.2 Academic Flexibility

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

Response: 21.14

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

Response: 667

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

Response: 3155

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

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 100

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

Response: 17

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

1.3 Curriculum Enrichment

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

Response:

1. GENERAL

In this institution, the crosscutting issues relevant to ethics, gender, human values, environment and sustainability courses are included in the curriculum and by hosting vibrant support activities for the faculty, staff, students and research scholars to develop the life skills. Equal opportunities are provided to

Page 30/130 30-11-2022 05:44:11

the students, faculty and staff without any gender discrimination. Gender related issues are addressed through awareness programmes by various club activities and the women empowerment cell. The Programme outcomes which define the graduate attributes are disseminated to all students and addressed during induction programme. The vision and mission statements includes self learners, experts, ethical and responsible engineers who will significantly contribute to environment friendly sustainable growth of the nation and the world. The girl students, women staff and faculty are contributing equally in all the activities of the institution. Many pressing and crosscutting issues such as global warming, water, pollution, health and hygiene, clean energy, gender equity (Women in leadership position) are offered as interdisciplinary courses.

2. PROFESSIONAL ETHICS & HUMAN VALUES

The objectives of professional ethics and Universal Human values in engineering education is to impart ethical principles, Code of ethics and responsibilities in their roles as professionals. The following courses in the curriculum focus on the normal principles, social values and loyalty to service.

- Universal Human values & Understanding Harmony
- Professional Ethics
- Intellectual Property Rights
- Ethical Hacking
- Cyber Forensics
- Indian Constitution and Society
- Constitution of India
- Essence of Indian Traditional Knowledge

The course Universal Human Values is introduced in the curriculum to develop the holistic perception for self exploration among themselves and also with family members. Faculty are trained to handle these courses. The co-curricular activities such as student association, symposium, paper/project presentation, professional society activities, various clubs, student council, class committee and extra curricular activities such as NCC, NSS, Sports and Culturals girl students participation is treated equally with boy students. Yoga education is provieded to all the students of the institution.

3. ENVIRONMENT AND SUSTAINABILITY

The various student clubs like Institution Innovation Cell, Entrepreneurship Development Cell, Swach Bharat, Unnat Bharat Abhiyan are functioning effectively to enrich the students knowledge on Environment and sustainability. The following courses address the environment, sustainability and climatic changes related issues.

- Disaster Management
- Environmental Science and Engineering
- Nuclear Engineering
- Environmental Engineering-I
- Environmental Impact Assessment
- Hydrology & Water Resources Engineering
- Irrigation and Environmental Engineering Drawing
- Hydrology
- Municipal Waste and Management

Page 31/130

The interdisciplinary courses offered in the revised curriculum enables flexibility in learning and apply their knowledge and skills in their own discipline of study.

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

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

Response: 129

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

2021-22	2020-21	2019-20	2018-19	2017-18
39	23	23	23	21

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

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

Response: 93.48

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

2021-22	2020-21	2019-20	2018-19	2017-18
3707	1867	1750	2447	1935

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

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

Response: 48.29

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

Response: 1084

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

1.4 Feedback System

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

Response: A. All 4 of the above

File Description	Document	
Any additional information	<u>View Document</u>	
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document	
URL for stakeholder feedback report	View Document	
Link for Additional Information	<u>View Document</u>	

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

Response: A. Feedback collected, analysed and action taken and report made available on website		
File Description	Document	
Any additional information	<u>View Document</u>	
URL for stakeholder feedback report	View Document	
Link for Additional Information	View Document	

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 71.23

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

2021-22	2020-21	2019-20	2018-19	2017-18
610	770	600	549	794

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
672	957	906	1026	1218

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

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

Response: 79.22

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

2021-22	2020-21	2019-20	2018-19	2017-18
386	543	492	535	646

Page 35/130 30-11-2022 05:44:11

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

2.2 Catering to Student Diversity

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

Response:

Students from a diverse environment, socio-economic and intellectual backgrounds are admitted. The institute environment and culture encourage foreign nationals to seek admission into various programmes. The institute offers programmes catering to the diverse needs of local, national and global Students.

Orientation programmes are conducted to first-year students to introduce about the institution, infrastructure, amenities, academic & administrative systems, rules, regulations and code of conduct. Eminent Personalities are invited to motivate the students coming from different background.

After admission, students are divided into groups based on their Higher Secondary specialization (Bio-Maths, Computer, or Vocational) and medium of instruction. In order to help students from biology stream to improve their knowledge in maths and computer science, bridge Courses are conducted. For vocational background students, separate special classes are arranged on Mathematics, Physics, Chemistry and Computer Science. The bridge courses make the students from diverse groups comfortable while attending regular classes. English communication skill training is provided for students from Tamil medium background.

We at KSR college of Engineering take much care to provide comfortness for students belonging to different socio-economic background. Special lectures are periodically arranged for gender equality, human values, Professional ethics and women empowerment. Students are not discriminated on the basis of gender. Women Empowerment Cell also celebrates women's day to emphasize their importance in the society.

All students are appreciated and treated equally by providing required infrastructure and well defined system. Library, Internet Laboratory, Language Laboratory, transport and other facilities are common for all sections of students.

Sensitization campaigns are carried out through various club activities like women Empowerment, Prevention/Grievance/Complaints/Internal Compliance Cells, Appeal Committee, NCC, NSS, RRC, YRC etc. Women wing in NCC is also functioning effectively.

The Performance of students are periodically monitored through assignment, tutorials, continuous assessment tests and lab classes. The slow and advanced learners are identified based on their performance, background, abilities to learn and accordingly remedial measures are taken to meet their needs.

Programmes for Advanced Learners and Slow Learners:

Advanced learners are encouraged to pursue value-added courses on advanced topics through NPTEL/SWAYAM portals. Self-study courses of 3 credits is considered and added to credit instead of one elective course in 7th or 8th semester on getting passed.

Advanced learners are motivated to prepare well and get placed in organizations that offer higher salaries. Students are encouraged to prepare for competitive examinations like GATE, CAT, UPSC, GRE, TOFEL, and IELTS in order to enhance their opportunities to admission for higher studies. Academically successful students may be permitted to avail the option of advancing 8th semester course in the previous semester to opt for full-time internship.

Slow learners are given additional inputs by conducting coaching classes with video clippings, handouts, additional assignments/ tutorials for problem solving. Mentoring System is in practice to resolve the difficulties faced by the slow learners both academically and personally. They are continuously monitored and motivated by mentors to improve their performance.

The institution also provides aptitude and soft skill training for slow learners to develop their employability skills.

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

2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year) Response: 11 File Description Document Any additional information View Document View Document 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 teaching-learning process is one of the major objective and the strength of KSR College of Engineering. Students are given a right blend of traditional and modern methods to make learning student-centric and a rewarding experience. Experiential learning, participative learning and problem solving methodologies are well adopted. Outcome Based Education (OBE) is implemented to achieve the desired

Page 37/130 30-11-2022 05:44:11

learning outcomes.

1.Experiential learning

Laboratory Sessions are conducted with content beyond syllabus experiments

Laboratory classes provide students with first-hand experience and focus towards better understanding of concepts. To develop creative thinking, few experiments and mini Projects are given to students which are not in the syllabus. This enables students to work in teams and motivate them to explore new innovation.

Summer Internship

Students are encouraged and facilitated to go for internship during summer holidays, and spend their time working on relevant projects, learning about the field studies, making industry connections, and developing both hard and soft skills.

Add-on Courses

Students are motivated to enhance the Knowledge skills through NPTEL / SWAYAM, Guest lectures apart from employability courses offered in the curriculum. These job-oriented courses equip the students to face the emerging challenges in the industries.

Project development

By doing projects in emerging technologies, students improve their knowledge in design and development. Project work are assisted by alumni and faculty mentors.

Industrial Visits

Every academic year, each departments organize industrial visits for students to provide exposure to industrial work culture.

2. Participatory Learning

Students participate in various activities viz. seminar, group discussion, Project Expo, Technical Symposium, attend conferences and present papers.

Students are guided to actively participate in many competitions like hackathon and inter institutional competition. They are also facilatated to interact with industry experts to understand industry expectations.

3. Problem-solving methods

Students are given exposure on problems relating to various cross cutting issues namely gender, human values, climate change, environment etc.. so as to make them to attempt solve problems. They are mentored by faculty and given ideas to solve the problems. Case studies are given to analyze and make decisions. Regular tutorials and Mini Projects also help them to solve problems.

File Description	Document
Link for Additional Information	<u>View Document</u>

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

Response:

Information and Communication Technology (ICT) has become an integral part of the teaching and learning process. Use of ICT tools has greater impact in students learning, as they can access the learning materials anytime from anywhere.

KSRCE, realising the Power of ICT, has constantly encouraged the faculty and students to use the ICT tools wherever it is possible. Faculty are given training to regularly update the various tools available for modern innovative teaching and learning.

All faculty are provided with computer facility with UPS and internet connection. They prepare course contents and upload in Google classroom for students to access from anywhere. Students can post their queries in the platform and chat with faculty. Assignment / Tutorial questions, MCQs are posted in this platform to improve their learning levels.

Faculty also Register NPTEL / SWAYAM courses and update their knowledge. Notable number of faculty have taken various courses and qualified the examinations in NPTEL.

Faculty are provided facilities to use online platforms such as zoom, Google meet and MS Teams to deliver lectures in online. Continuous assessment tests and end semester exams are conducted using these platforms.

High-speed internet access is available in conference hall, seminar hall, auditorium and laboratories. Class rooms are provided with LCD projectors to deliver course effectively and students can download the PPTs for further reference. The use of e-PPTs with animations and simulations helps students understand theoretical concepts in a simple way.

Smart classrooms are available in all departments where the faculty can download video clippings, course contents and quizzes online. Virtual Laboratories used for the conduct of some practical courses which helps students to learn more by designing their own experimental setup, take readings and analyse.

During pandemic faculty have video graphed the experimental setup and demonstrated the conduct of experiments and shown how experimental readings are taken.

Using ICT tools and with online mode, guest lectures, conferences, symposiums, placement training are conducted enabling students to participate from remote areas.

Apart from this each departments has certain application software meant for simulation, design and analysis. Digital Library provides e – resources, namely, e-books, e-journals, databases which the faculty can access from anywhere. Use of ICT tools and online mode of education have become inevitable for

effective teaching and learning. KSRCE and its faculty are fully prepared for the use of ICT tools.

File Description	Document
Any additional information	View Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document
Link for Additional Information	View Document

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

Response: 12:1

2.3.3.1 **Number of mentors** ??????????????????????

Response: 190

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

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

Response:

The Academic calendar is prepared by Controller of examinations (CoE) in consultation with principal. It is prepared well in advance before the commencement of classes in the beginning of every academic year and circulated among faculty and students. The calendar contains the working days for the odd & even semesters, schedule of all curricular activities including continuous assessments, end semester examinations and general holidays. The academic comprises the start and finish dates of classes, Continuous Assessment Test timetables, End semester Examination (ESE) time tables, and tentative dates for practical and viva voce examinations.

The Continuous Assessment Tests are kept running smoothly by the Controller of Examinations. The CAT answer scripts were given to the students for clarification once the scripts had been evaluated. Normally faculty will complete the evaluation within three working days from the date of exam.

The CoE Office is responsible for the announcement of academic schedule, preparation of question papers, conduct of examinations, evaluation of answer scripts, and declaration of results and issuing of

grade sheets. Students take the End Semester Examinations (ESE) in November/December and April/May of each academic year. The schedule of end semester examination will be fixed by the CoE and displayed on common /departments notice board and posted in web portal (ksrce.ac.in) for easy access.

The calendar also provides schedule for Co-curricular activities, government and local holidays apart from the general holidays. The Principal conducts curricular and extracurricular review meetings on regular intervals to check the implementation and progress of various activities given in the academic plan. The calendar facilitates the students to plan and prepare them for internships during winter and summer vacations. The Academic calendar for the last five years is uploaded.

Teaching Plan

The faculty prepares their lecture plan ahead of the semester and approved by the module coordinator and Head of the Department. The faculty prepare their lecture plan based on the working days/calendar and conduct classes.

Attendance and Assessment Record is issued to all faculty, which includes hour by hour lecture plan along with the mode of content delivery for each course

Attendance and Assessment Record contains the following details to help effective delivery of the course content, for the attainment of COs, POs, and PSOs.

- Vision and Mission of the Institution and department
- Programme outcomes
- Content beyond syllabus/modes of delivery
- Guest lectures arranged on various topics
- Theory/Tutorial/Laboratory classes handled
- Remedial classes for slow learners
- Performance analysis of students
- Class/Personal Timetable
- Attendance details of students
- Performance of students in Assignment/Tutorial/Laboratory/Continuous assessment tests

The above details are well maintained by every faculty and are subject to periodic academic audit.

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

2.4 Teacher Profile and Quality

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

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

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

Response: 32.63

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

2021-22	2020-21	2019-20	2018-19	2017-18
74	78	68	76	76

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

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

Response: 10.35

2.4.3.1 Total experience of full-time teachers

Response: 2111

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

2.5 Evaluation Process and Reforms

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

Response: 14.8

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

2021-22	2020-21	2019-20	2018-19	2017-18
18	17	15	12	12

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

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

Response: 3.26

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

2021-22	2020-21	2019-20	2018-19	2017-18
16	8	131	135	147

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

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

Response:

IT integration:

The College being an Autonomous institution is continuously carrying out reforms in its examination systems through integration of IT in all the processes of the examination system. The reforms are enforced in the continuous internal assessments, marks entry (Assignments, Tutorials, continuous assessment tests etc.) and the performance of students are analyzed by generating necessary reports such as maximum marks awarded, class average, Calculation of COs and POs and for Identification of slow and advanced learners.

Class time-table, faculty time-table and class room allocations are prepared through the software. Faculty and Staff mark their attendances through biometric system. Their leave and permissions are granted by HoDs/Principal through on line. All faculty and staff know their leaves available on line.

End semester examination fee is notified through circulars in the intranet. Hall tickets are generated in the system, once the examination fees for regular and arrear papers are paid. The Schedule of End Semester Examination can be downloaded on line. The list of invigilators and their schedule are prepared and sent to the respective faculty through e-mail.

The reforms are effected in the continuous internal assessments, marks entry (Assignments, Tutorials continuous assessment tests etc) and the performance of students are analyzed by generating necessary reports such as maximum marks awarded, class average, Calculation of COs and POs. The marks awarded in the end semester examination are entered into the computer CO-wise. The system calculates total mark including internal marks, and declares the result, with individual subject grade, Semester GPA and cumulative GPA.

Facilities are available to conduct examinations IAT/ ESE/ Quizzes through online. IT systems are deployed to conduct online examinations with appropriate proctoring features like Periodic snapshots, IP Address binding, Candidate behaviour Stat, Disable Copy paste, Print Screen Lock and live Proctoring. Invigilator can lock the test of the student if he/she find any suspicious cheating activities and it is an add-on feature with auto- proctoring facility to entrust the credibility of the assessment.

The activities related to examination Process are integrated into IT; right from the student registrations and payment of examination fee are made through on line process with personal log-in details. The activities integrated into IT include

- Hall ticket generation
- OMR sheet generation/Co wise mark entry
- Dummy number generation
- Present and absentees statements generation
- Bundling of answer scripts subject wise
- Results tabulation
- Publication of Results
- Result analysis branch wise and semester wise
- Revaluation Registration through online
- Grade Sheets/Transcripts/Consolidated Mark sheets

In addition to this, the conduction of online examination using google forms, google classroom are also available. Facilities are also available to conducts quizzes on line. The internal marks comprising of Assignments, Tutorials, Continuousassessment tests are generated using IT and submitted to Controller of examination. The COE office takes care of adding Internal marks and end semester examination mark for the calculation of total marks for each subject and declares the result.

The attainment of COs is separately executed considering the various components such as assignments, tutorial, continuous assessments and end semester examination marks under direct assessment and course end survey under indirect assessment.

The COs are appropriately mapped to the POs, and correlated with appropriate weightage for the COs based on the levels of contribution. The attainment of POs is calculated after mapping the COs to the relevant POs, under calculated after mapping the COs to the relevant POs, under direct assessment and exit survey, employer survey and alumni survey under indirect assessment.

The survey questionnaire is appropriately designed distinctively for exit survey at the time of students leaving the college. Different sets of questionnaire are framed for the alumni and employer survey. The surveys are taken from all stakeholders through on line.

Faculty developed course contents and upload in Google Classroom and MOOC Platform and disseminate to all students. Students can use the study materials any time anywhere. Related video contents are also developed and uploaded. E-books, E-journals and magazines are available in the digital library and accessed by faculty and students through intranet and internet.

The institution is fully prepared to use information and communication technologies to integrate into teaching & learning process.

Reforms in the Examination Procedures:

Two sets of question papers are prepared for each course. The Controller of examination selects any one of the question paper to maintain confidentiality. Question papers are set by subject experts within the institutions and other institutions.

Questions are set for all the COs in the syllabus, with internal choice, to assessall the course outcomes. The question papers are scrutinized by the module coordinators/external subject experts to maintain the standard and check if all COs and their learning levels.

The answer key and the scheme of valuation are prepared by the Course coordinator of the subject with the approval of module coordinator and HOD. The chief examiner will conduct pre-valuation meeting to explain the answer key and scheme of valuation to examiners to maintain uniformity in evaluation. Examiners are allotted only 30 answer script in a session for evaluation.

Number of students seated in a hall for internal assessment test and End semester examination is 30. A squad committee constituted by Controller of Examination visits all the examination halls to oversee the

conduct of the examination and to avoid any malpractices. Valuations of answer papers are centralized with CCTV surveillance.

Facilities are provided for students to see their answer scripts after the publication of results, on request. They can appeal for revaluation/retotaling of the marks in the course and also request for a Photo copy of the answer book.

Seminar, project, assignment, and presentation etc. are included as components of evaluation. The value added courses and add on courses are printed in the grade sheets with relevant grades. The Grade sheets have security features to avoid manipulations in the mark sheet. The entire examination system is automated.

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

2.6 Student Performance and Learning Outcomes

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

Response:

KSR College of Engineering implemented Outcome Based Education in alignment with UGC and AICTE. Learning Outcomes and Objectives are well defined for each course including practicals. This helps both the faculty and student to come to a common understanding of their responsibilities, as the outcomes are measurable and quantifiable. Students understand what they will have to learn and what they will be able to do upon Completion of course / the programme.

PEOs are defined for each department in alignment with their vision and mission statement. Programme Specific Outcomes are framed to help attain PEOs and the vision of the department. The graduate attributes are examples of the expected outcomes of a graduate engineer and are well defined by NBA in terms of POs.

The Curriculum and Syllabi are designed such that the attainments of POs and PSOs can be measured through the COs. The COs of each course are mapped with relevant POs. There are 5 COs for each course, and each of them are measured through various assessment tools. To help students to understand about OBE, the faculty discuss the PEOs, POs, and PSOs at the beginning of the course in every semester.

The POs and PSOs are displayed / printed in

- College website
- All prominent places of the department, faculty cabins, department library, main library,

Classrooms and Laboratories

- Curriculum and Syllabi book
- Faculty Class Records
- Lab Records and Lab manuals

The POs and PSOs are made available to all stakeholders through website, Seminar / Workshop.

The Course outcomes are disseminated to students through

- Curriculum and Syllabi book
- Student induction programme
- Question papers
- Mentor-Mentee meetings

The COs of each course is discussed with the students at the beginning of each module in the class, by the faculty. The COs are mentioned in the internal assessment test and end semester question papers along with its knowledge level for each question. This makes the students to assess themselves as to what extend their learning outcomes are.

The course end survey gives the feedback from every student on the attainment of COs in all the courses of the semester. The outcome and attainment levels are analysed and used for further improvement.

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

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

Response:

Course Outcomes (COs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) are evaluated through direct and indirect assessments.

Attainment of COs

The attainment of COs are based on direct and indirect assessment.

Direct assessment tools for COs

The various tools used for the direct assessment are

- 1. Assignments
- 2. Tutorials
- 3. Quizzes
- 4. Continuous Assessment Tests
- 5 .End Semester Examination
- 6. Rubrics for project works

The quality of questions and coverage of COs in all the assessment tools are ensured by the module and course coordinators. The end semester exam question papers are scrutinized by the module coordinator / external subject experts in the controller of Examination office, to check if all COs and their learning levels.

Indirect assessment of COs

The tools used for Indirect assessment include course end survey collected at the end of every semester for each course. Data on students experimental learning such as paper presentations, project contests, internships, in-plant trainings Industrial visits, career development and workshops organized are also used to measure the attainment.

Cumulative attainment of COs

Attainment of COs = [90% of Direct Assessment + 10% of Indirect Assessment]

Attainment of POs and PSOs

The attainment of POs and PSOs are measured directly from the COs. The relevant COs from various courses are mapped with the appropriate POs. The attainment of POs and PSOs are measured quantitatively through COs by assigning weightage to the COs, that are contributing to a particular PO / PSO. The level of contribution to a PO / PSO may be Substantial (3), Moderate (2), and Slight (1) respectively.

Indirect Assessment of POs / PSOs

The Indirect Assessment of POs / PSOs include the programme exit survey collected from all students upon completion of the programme, through questionaire; the survey questionaire collected from alumni, employer and also survey obtained from internships, workshops etc..

Cumulative POs and PSOs attainment

The attainment of POs and PSOs are based on the contribution of direct and indirect assessments as per the formula

PO/PSO attainment = 80% of direct assessment + 20% of indirect assessment

Cumulative POs and PSOs attainment are calculated at the end of every academic year and are analysed for further improvement through discussion in PAC, DAB and BOS.

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

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

Response: 98.57

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

Response: 481

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

Response: 488

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

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.94

File Description	Document	
Upload database of all currently enrolled students	View Document	

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

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

Response:

The Research and Development (R&D) activities at K.S.R. College of Engineering are accomplished by actively involving faculty, scholars and students.

The main focus and objectives of R&D are:

- To promote research and development with special emphasis on rural and socially relevant issues
- To inculcate multi-disciplinary research and product developments

K.S.R. College of Engineering has well-defined policy to promote Research and development. Faculty members, scholars and students are encouraged to do research by providing the following as a part of policy decision:

- Seed money for projects that are socially relevant and industry applications.
- Providing necessary infrastructure facilities in terms of space, computers, software, testing equipment, books & journals.
- On-duty leave, travelling allowance (TA), dearness allowance (DA) and registration fees for presenting papers in national/international conferences.
- Flexibility in academic workloads when the research is nearing completion.
- Special allowances on completion of doctoral degree.
- Incentives for faculty submitting proposals to funding agencies on getting the grants.
- The cost of patent filling for research outcome is borne by the institution.

The Research Advisory Committee (RAC) constituted by the Principal invites project proposals for seed money from the institution. The seed money proposals are scrutinized for its relevance and recommend for the grants.

All faculty members have free access to Science Direct, IEEE, ASCE, Springer, N-LIST, ProQuest, EBSEO Engineering Core, World eBook Library, DELNET to refer the publications, academic related topics, and the most recent developments in various fields.

The RAC guides the faculty/research scholar to check plagiarism of research/technical papers before submitting to any journal/conferences using Urkund software package. Besides, Members of faculty are motivated and rendered financial support to attend seminars and conferences and present papers. As a result, number of research papers are published in journals and presented at various seminars and conferences. It also provides guidelines for submitting research proposals to various funding agencies like AICTE, UGC, DST, CSIR, MoEF, TNSCST and industries.

Research Centres (RC) are established in seven departments of the institute with necessary equipment, software and computing facilities for carrying out research activities. The salient research facilities of the

Page 50/130 30-11-2022 05:44:11

institute are Automatic universal testing machine, Steam curing chamber, Paver block making machine, Pan mixer, Master MIG welding machine, Spectrum Analyzer, PCB prototyping machine, Power quality Analyzer, Solar PV simulator, Network Analyzer, Nano Boards and Fuel injection calibration test –bench with nozzle tester. Software such as ANSYS, MATLAB, ANSOFT HFSS, NETSIM networking simulation software, Macromedia Studio MX full pack, Visual studio. NET pro full pack and MODEL SIMSE10.0 are available for research. All the Research centres are recognized by Anna University, Chennai and full-time as well as part-time research scholars are allotted by the University to pursue their research work in these centres under the guidance of the recognized supervisors in the institution.

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

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

Response: 6.91

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

2021-22	2020-21	2019-20	2018-19	2017-18
11.17570	6.66759	6.98265	5.32443	4.38560

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

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

Response: 20.19

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

2021-22	2020-21	2019-20	2018-19	2017-18
8	9	35	98	87

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

3.2 Resource Mobilization for Research

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

Response: 92.07

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

2021-22	2020-21	2019-20	2018-19	2017-18
8.261	23.79085	21.74283	12.97039	25.3025

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

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

Response: 6.13

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

2021-22	2020-21	2019-20	2018-19	2017-18
16	10	14	18	14

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

3.2.3 Percentage of teachers recognised as research guides

Response: 15.69

3.2.3.1 Number of teachers recognized as research guides

Response: 32

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

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

Response: 57.56

$3.2.4.1\ \textbf{Number of departments having Research projects funded by government and non-government agencies during the last five years}$

2021-22	2020-21	2019-20	2018-19	2017-18
7	4	6	6	4

3.2.4.2 Number of departments offering academic programes

2021-22	2020-21	2019-20	2018-19	2017-18
10	10	9	9	9

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

3.3 Innovation Ecosystem

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

Response:

KSRCE has created an excellent and well-balanced ecosystem for innovation, creation and transfer of knowledge supported by Research and Development Cell, Industry Institution Partnership Cell (IIPC), Institution Innovation Council (IIC), Community Radio, and Entrepreneurship cell.

The Institution provides a conducive environment for promotion of Innovation and Incubation. All required facilities are provided and Guidance is extended to the faculty, research scholars and students. They are encouraged to actively involve in the application of Technology for societal needs. Necessary support is provided for Documentation, Publication of Research Papers and also for obtaining patents. Awareness meets, workshops, seminars and guest lectures on Entrepreneurship are organized. Students are provided opportunities to directly interact with outstanding entrepreneurs excelling in their field.

The Center for Research, Anna University, Chennai acknowledged 32 faculty members of the college as research supervisors to carry out research leading to a Ph.D degree. 160 research scholars successfully completed their doctoral degrees under the research centre of the college, where 292 research scholars were enrolled. A total of 628 research articles have been published in peer reviewed journals with high impact factor and H-index of the college is 33. Furthermore, faculty members authored 300 book chapters/conference papers at national/international level. Our Institution filed 91 patent during the last five years. Of which 19 are granted. The centre of Intellectual Property Rights, Anna University, recognised out institution for filing more number of patents.

Institution's Innovation Council has created an ecosystem for supporting young minds towards innovation and entrepreneurship. It provides assistance and encouragement for successful start-ups. They are motivated to convert innovative ideas into working prototypes. The Council trains youngsters on problem-solving, concept development and design thinking.

The Entrepreneurship cell, launched with aims at spreading awareness among students and staff about the value of entrepreneurship. Entrepreneurship cell at KSRCE also promotes entrepreneurship as a viable career and provides career guidance support through entrepreneurship Awareness Camps, Start-ups, Workshops and FDPs for its beneficiaries periodically.

KSREI Community Radio 90.4 MHz, is an initiative by KSREI for the empowerment of the Tiruchengode community. It provides an opportunity for the community and our students, to help them get to know their basic rights, duties and responsibilities as citizens in order to be successful in life through our programmes, interactions, events and activities. It builds an effective, vibrant and sustainable community, to support development in health, science and technology, environment, agriculture, rural and all other aspects. It helps in enhancing the general welfare and social fabric of the local people. Our Community Radio 90.4 MHz website link is: http://ksrei.org/ksr-fm-radio/.

The institution has partnered with IITM Research Park (IITMRP) incubation, product development and idea generation. Notable number of students are participating in the programmes and activities organised by IITM Research Park. "Build Club" formulated by IITMRP is created involving students from I year to III year.

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

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

Response: 122

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

2021-22	2020-21	2019-20	2018-19	2017-18
31	26	27	25	13

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

3.4 Research Publications and Awards

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

Response: A. All of the above	
File Description	Document
Any additional information	<u>View Document</u>
Link for additional information	View Document

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

Response: 3.19

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

Response: 102

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

Response: 32

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

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

Response: 1.9

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

2021-22	2020-21	2019-20	2018-19	2017-18
89	78	85	95	98

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

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

Response: 1.93

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

2021-22	2020-21	2019-20	2018-19	2017-18
27	65	39	176	145

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

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

Response: 6.72

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

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

Response: 18.5

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

3.5 Consultancy

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

Response: 59.72

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

2021-22	2020-21	2019-20	2018-19	2017-18
9.43614	14.88581	14.24399	12.36242	8.7874

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

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

Response: 49.83

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

2021-22	2020-21	2019-20	2018-19	2017-18
15.03625	11.7588	14.008	5.15779	3.86779

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

3.6 Extension Activities

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

Response:

Students of KSRCE are actively involved in extension activities in the neighborhood community. The extension activities make students to understand the various societal problem and work for solving them. Besides, it makes the students to think empathetically and help the mankind.

Social service and solving problem related to social issues are the need of the hour for the economic growth of the nations. Students of KSRCE are well addressed that science and technology can only solve societal problems.

The institutions' NSS and NCC units take part in activities related to social services such as tree plantation within and outside campus to ensure the importance of green environment among the neighborhood community.

Students regularly organizes and participate in "Clean India Movement" (Swachh Bharat) in the neighboring villages, Government schools and make aware of the cleanliness to the community and the children. A "Cycle Rally" is also conducted for 16 km on Clean India Movement.

Awareness rallies on global warming are conducted to sensitize the local population about climatic changes.

A rally on International Day on Drug Abuse is conducted to sensitize the youth in the neighbouring town, Tiruchengode.

Blood donation camps are regularly conducted in collaboration with government hospitals, Namakkal, Erode, and Lions Club.

Students have participated in Cyclone GAJA relief works on Puthukottai district and donated relief materials like food items, cloths, medicines etc. NSS volunteers and NCC cadets visit regularly to old age homes and orphanage to conduct cleaning activities and educating the children.

"Voters Awareness Rally" is conducted to create awareness of voting and volunteering activities for the smooth conduct of elections in nearby localities.

Effects of usage of plastics is highlighted through awareness program in the schools and local communities.

As directed by the Government of Tamilnadu, the program namely "Meendum Manjapai Eayakkam" (using again yellow color cloth bags) is conducted on the campus.

A short film on my contribution towards making India clean is released to sensitize the local community. The extension activities hence created impact in the local community and among students, as they are brought out by dailies. Furthermore, the student participation is spontaneous.

Page 59/130 30-11-2022 05:44:12

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

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

Response: 64

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

2021-22	2020-21	2019-20	2018-19	2017-18
12	10	13	15	14

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

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

Response: 133

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

2021-22	2020-21	2019-20	2018-19	2017-18
30	28	28	22	25

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

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

Response: 88.94

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

2021-22	2020-21	2019-20	2018-19	2017-18
1870	2110	2227	2266	3141

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

3.7 Collaboration

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

Response: 330.4

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

2021-22	2020-21	2019-20	2018-19	2017-18
525	319	447	195	166

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

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

Response: 58

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

2021-22	2020-21	2019-20	2018-19	2017-18
16	11	10	11	10

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

Response:

The campus is located in a sprawling 29.8 acres of lush green with a builtup area of 53,654 sq.m. The campus includes peaceful and relaxed environment for learning. The open space is around 16 acres, that provides good ventilation.

There are 5 academic blocks that cater to the needs of teaching-learning process and the co-curricular activities as detailed below.

S.No.	Particulars Description		Required as per AICTE norms	Available
1	Class Rooms(UG)	Multimedia Projector and Internet Connection	39	42
2	Class Rooms(PG)	Multimedia Projector and Internet Connection	18	18
3	Tutorial Halls	Multimedia Projector and Internet Connection	12	15
4	Smart Class Rooms	OPS Computer & Touch screen with Interactive Display		10
5	Seminar Halls	LCD Projector, Screen, Computer With LAN and PA system	-	10
6		Well Equipped with Multiple Set of Apparatus, Computing Machines, Specific Software and Net Connection		65
7	Workshop	Lathe, Welding Machine, Cutting Machine and	1	1

Hammer

- All classrooms are well ventilated and equipped with ICT facility
- Smart classroom and seminar halls with ICT/AV facilities to enable the students with flipped class and blended learning. To provide practical exposure, all departments are equipped with state-of-art laboratories, project and Research Laboratory.
- The laboratories are upgraded periodically to cope with new curriculum and current requirements.
- Centres of excellence to enchance the competency in specific domain with Industry Trained Faculty are provided.
- Language laboratory with an area of 132.85 sq.m and computer systems is available to enable students to excel in all four skills LSRW of the language.
- To protect the entire network without spamming, Malware and Trojans attack, SOPHOS XGS 4500 Security Appliance with Xtreme Protection Firewall has been installed.

Library Resources

The central library covers an area of 1215 sq.m and functions from 8 A.M to 8 P.M and is equipped with 30,990 titles and 80,667 volumes, Magazines, Online and Offline Journals and periodic sections are also available with OPAC facility. Each department has its own department Library for the benefit of faculty.

Computing Facilities

Each department has seperate computer laboratory with adequate number of computers, LAN and Wi-Fi facilities. There are 1206 systems connected to internet with a bandwith of 280 Mbps. In order to support ICT based teaching and learning, all blocks are equipped with Wi-Fi facility. A seperate data center with high end Blade and Rack Servers to store and share the pool of data related to academics. The college is seperately having a high voltage line(HT of 700KVA). To run all the computing machines with uninterrupted power, a total 480 KVA UPS systems is available separately for different laboratories. The entire campus has also equipped with 760 (380*2) KVA capacity of power generator, in order to run without power interruption.

E-Resources

Study materials and videos lectures are posted for all subjects in the Google Classroom which would help the students for their learning process. Assignments, Online tutorials and quizzes were conducted using Google Classroom.

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

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

Response:

Response:

In addition to Teaching Learning, the institution also focuses on the extra-curricular activities such as sports & games and cultural activities. In order to ensure the health and fitness of students, faculty and staff, Gym and Yoga centres are also provided in the campus.

- The institution has a playground with standards 400 m track, and outdoor games-football, Cricket, Hockey, Volley ball, Tennis, Basket ball, Kabaddi etc.
- The indoor stadium with an area of 594.58 sqm provided with facilities for table tennis, Shuttle cock, Basket ball, Carrom etc..
- The ultra modern gym in the indoor stadium facilitates students (Boys&Girls) to maintain their fitness
- To have the inner peace, a yoga centre and meditation hall is available with 133.33 sq m for students and faculty.

Facilities of Sports Activities:

S.No	Description	Nos	User Rate	Area (Sq m)	Year of Establishment
		Outdoo	r Games	<u>, , , , , , , , , , , , , , , , , , , </u>	IL
1	400 m Standard Athletic Track/	1	50	32374.9	2003
	throw/Javelin throw/Shotput				
2	Foot ball Field	1	20	5537.76	2004
3	Hockey Field	1	20	5202.57	2003
4	Volleyball Court	3	14	483.09	2004
5	Basket ball Court	1	12	464.51	2002
6	Tennis Court with Fence	1	6	706.063	2002
7	Ball Badminton Court	4	10	1300.64	2002
8	Kabaddi Court	4	12	557.41	2003
9	Hand ball Court	1	12	929.03	2008
10	Kho-Kho Court	1	12	929.03	2009

11	Cricket Field	1	22	15062.74	2003
Indoor Games					
12	Table Tennis Court	6	6	594.58	2003
13	Carrom	10	12		2003
14	Badminton Court	4	10		2003
15	Basket ball Court	1	20		2002
	7.	Gymn	asium		
16	Indoor Gym(Men)	1	100	297.28	2004
17	Indoor Gym (Women)	1	28	89.18	2017
18	Open Gym	2	50	111.48	2019
	Yoga Center Yoga Center				
19	Meditation Hall	1	50	133.33	2020
	Swimming Pool				
20	Swimming Pool	1	15	202.34	2003
Auditorium					
21	Auditorium	1	900	1002.63	2008
22	Dressing room/Wash room(Male and Female)	1	20	111.48	2012

Adequate budget is allotted for maintenance of sports facilities, procuring sports kits and participating in extra mural competitions.

NSS:

College has an NSS unit of 100 students. Various socially relevant services are provided by NSS students like blood donation camp, counter checking of pulse polio drive, adult education etc.

Facilities for cultural activities:

- Musical instruments like keyboard, guitars, drum set and Audio system with a 92.90 sqm for practice
- Dance room is equipped with floor mat and AV System.
- A Separate music club is functioning and is called as Sangeet Mela.

Health and Hygiene:

- The college specially takes care of the health and hygiene of the students, faculty and staff. Proper arrangement of drinking water is available everywhere in the college campus (R.O. purified drinking water).
- The first aid box is also there for the treatment of sick.
- The institution has tie up with our Dental hospital in emergency needs and Ambulance is available for 24*7 hours in the campus, run by the management.
- Medical facility with Doctors is available in the Hostels.

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

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 95

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

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

Response: 43.84

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

2021-22	2020-21	2019-20	2018-19	2017-18
72.68	67.61	177.79	200.29	350.67

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

4.2 Library as a Learning Resource

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

Response:

4.2.1. Library Automated Integrated Management System (ILMS)

Response: Integrated Library Management System (ILMS) software (OPAC) for the College Library was installed in 2001 using LibMan 1.1. In 2022, it was upgraded with iPALPAP ERP, a fully automated 6.1 version. This is user friendly software which helps faculty and students to find required books, through both internet and intranet.

List of Modules available in the ILMS are:

Name of the ILMS	Nature of	Version	Year of Automated
Software	Automation		
'DALDADEDD	T 11 A 1		2022
iPALPAP ERP	Fully Automated	6.1	2022
LibMan	Fully Automated	1.1	2001 - 2021

Features of Library software:

- 1.E Gate: This helps the admin to keep track of all the users, entries and exit.
- 2. **Books Entries**: Details of newly arrived books with title, author, publisher, date of purchase are documented and an accession number is generated for the book.
- 3. **Acquisitions**: This enables the librarian to keep a track on the library collection regarding purchase/gifts. Details regarding the order of books, claiming and receipt of materials are well documented and maintained by using ILMS software.
- 4. **Circulation:** The circulation module enables the librarian to create and manage the details of the book lend along with keeping a tab on their book issue date, return date, dues, and fines. It enables a smooth circulation of books in the library.
- 5. **OPAC:** An OPAC is a bibliographic database of library materials designed to allow library patrons to search for books and other materials without the assistance of the librarian. Starting as a

- workstation in a library, it has expanded to an online system available anywhere at any time. Easy to use, patrons can search for materials by title, author, subject, or keyword with no training required. An OPAC is often the main point of contact for library that facilitates the users with the collection.
- 6. **Stock Verification**: This helps in annual stock verification; the manual process is replaced with ILMS. Stock verification using barcode technology with library automation software is easy to use moreover it reduce, the labor, cost and eliminates the typing errors. Since there is no manual procedure involved, the verification report generated by the system is accurate and reliable. During stock verification proper care should be taken for sorting out and keeping aside the damaged books so that after completion of the verification process these books can be placed to the authority concerned for further action. All the library recourses can be verified using bar coding.
- 7. **View the Reports**: Various reports like Books issued, returned, newly added and pending dues can be generated on daily basis from ILMS.

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

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

Response: A. Any 4 or more of the above

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

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

Response: 24.47

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

2021-22	2020-21	2019-20	2018-19	2017-18
19.71	16.44	23.44	28.81	33.97

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

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

Response: 41.57

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

Response: 1018

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

4.3 IT Infrastructure

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

Response:

Response:

The institute has well-structured IT facilities with 280Mbps bandwidth for 24x7 connectivity. The institution has wired and 15 Wi-Fi hotspot at prominent locations -wireless connectivity for use of students and faculty members across the campus including the hostel. Adequate budget is alloted for carrying and maintenance of the IT Infrastructure.

A separate Information Technology Enabled Services (ITES) team with in-house staff is constituted to take care of the IT & related needs of the campus such as Hardware & Networking, Email solutions, Software solutions, etc.

IT Infrastructure and Internet Facilities:

- 280Mbps of dedicated 1:1 leased line internet connectivity from AIRTEL.
- MAC-binded 'Wi-Fi' provision at selective in-campus hubs and hostels.
- Desktops (1206) from various brands with latest configuration for students' usage.
- Compatible branded Higher-end servers to meet the IT-specific tasks like file, database, virus and

backup management.

- Healthy connected 'CAMPUS-LAN' via Optical Fibre acting as backbone and CATx cabling throughout the campus for anywhere data access with structured cabling.
- Piracy-free IT environment through proper licensing of software. Tailored 'Microsoft Campus Agreement (MCSA)' to utilize the latest Microsoft products.
- A separate 'Open-source Lab' to extend open-source migration.
- 'Language Lab' with audio-video gadgets and state of the art communication teaching-learning tools.
- A dedicated helpdesk of 6 member technicians to address the computing and network issues.
- **Internet Accessibility**: laboratories, class rooms, library, department, administrative area & seminar/AV halls.

Wi-Fi Availability: Classrooms, laboratories, department offices, hostels and library are connected through 802.11 a/b/g/n protocol

- IT Security Model: Secured IT infrastructure through SOPHOS XG firewall to prevent unauthorized access with user privileges. Three-way Wi-Fi protection via IP restriction, MAC-binding & WPA/WPA2 password encryption.
- The campus network and its active components are administered, maintained and controlled by ITES.
- ITES operates the campus network such that service levels are maintained as required by the Institute departments, and hostels served by the campus network within the constraints of operational best practices.
- Information and network security is provided through firewalls to manage misuse of IT services provided.
- The mail services inside the college are configured to block spams and malicious attachments.
- Backup procedures have been established and carried out on the college servers to handle risk of information loss. Separate 'Data centre' has been provided for IT service management.
- Security updates are carried out regularly.
- The system administrators' team monitors attacks on the network/systems.
- The websites with unsecured contents are blocked to prevent the risk of access to untrusted websites.

Allotted Budget for updating its IT facilities:

S. No	Academic Year	Allotted Amount(in Lakhs)
1	2021-22	20.00
2	2021-22	15.00
3	2019-20	10.50
4	2018-19	25.00
5	2017-18	31.70

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

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

Response: 2:1

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

4.3.3 Bandwidth of internet connection in the Institution.

Response: ?50 MBPS

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

4.3.4 Institution has the following Facilities for e-content development

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

Response: A. All of the above

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

4.4 Maintenance of Campus Infrastructure

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

Response: 74.28

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)

2021-22	2020-21	2019-20	2018-19	2017-18
131.44	147.56	256.48	421.58	461.98

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts	View Document

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

Response:

Response

- The Institution has established systems and procedures for maintaining and utilizing physical, academic and support facilities such as Laboratories, Computer Systems, Sports facilities etc.
- The maintenance of various facilities are carried out by the respective maintenance committee and hands of the department/sections, with the support of estate officer/housekeeping. Staff on daily basis and periodically. Necessary care has been taken to keep the equipment and machines in working conditions. In case of break down standard procedure is followed to bring this in working condition. Supervisors and technicians are appointed to monitor and maintain physical facilities and housekeeping.

Maintenance Committee

- The Institution has a separate Maintenance Committee that oversees the maintenance of buildings, classrooms and laboratories. The maintenance officer conducts periodic checks strength and small damage occur.
- Adequate in house staff are employed to meticulously maintain hygiene, cleanliness

- and infrastructure in the campus so as to provide a congenial learning environment. Classrooms, Staffrooms, Seminar halls and Laboratories, etc are cleaned regularly. Wash rooms and rest rooms are well maintained. Dustbins are placed in every floor. The Green Cover of the campus is well maintained by a full time gardener
- Civil maintenance team is involved in the maintenance of building facilities. This team looks after the regular maintenance of civil works such as furniture repairs, masonry and plaster works, painting, carpentry and plumbing. Housekeeping staff look after the maintenance of rest rooms, approach roads and neatness of the entire premises. Housekeeping services are regularly executed and monitored.

Laboratory Maintenance

Heads of the Department in consultation with the lab in-charges and technical staff oversee the
maintenance of the academic facilities pertaining to their laboratories, workshops and classrooms.
 Calibration of the meters and equipment is done by third-party companies on regular basis, to
ensure accurate reading for the experiments conducted in the laboratories.

Electrical Maintenance

- The electrical maintenance section is headed by the HOD/EEE.A senior in professor in the electrical department is supported by electrical team in the campus with the help of Electrical Engineer, Supervisor and Electricians.
- This section take care of Installation of new electrical appliances, electrical maintenance of .The Earthing contains Power plant and power consumption of all electrical systems are periodically checked to ensure safety of personels.

Computer Maintenance

- Computers are maintained in the Institution by a team called ITES under the supervision of HOD/CSE. This division provides the integrated IT services like smooth running of automation, upgradation and maintenance of automation package, institution website, biometric services, troubleshooting of hardware, networking equipment's including internet connectivity, procurement of hardware, software and CCTV.
- Laboratory assistants under the supervision of the System administrator maintain the efficiency of the computers and accessories in the institution.

Transport Maintenance

- The buses are covering all the routes of 60km radius from college for the use of faculty and students. The Emergency Van(Ambulance)is available in the institution with round the clock for students and faculty at the time of emergency.
- Separate workshop is available for the maintenance of buses and other vehicles.

Library Maintenance

• The Library is headed by a librarian and supported by the assistant librarian, supporting staff (Senior and junior clerks) for Journal and Reference sections. In addition to the above staff, juniors

Assistants and attenders will help the students for searching and lending of the books in the library. The books are maintained by rebounding the books. The book volumes of journals are bound periodically for further use by faculty and students.

Physical Education Department Maintenance

• The Physical education department is facilitated by the physical director to educate the students in sports and fitness. The marker in the physical education department makes the playfield ready for the students, by marking the ground and providing the play kits.

Security Maintenance

- The Security of the institution is taken care by the Security Head. He is supported by a Security officer and the sergeant. Security officer assigns the duty to the security guards to control and monitor the institution and its premises.
- The institution is fully equipped with CCTV surveillance camera, where security officer's monitor frequently in-order to avoid any unnecessary incidents.

Solar Energy System Maintenance

• The Institution has provided clean and green energy. Provision of Solar Energy system installed on roof of the institution which meets the electricity demand of institution about 120kw. This energy is used as power backup supply during power cut from electricity department. Solar Energy Power Plant and use of Solar Energy further helps in reduction of the Carbon Footprints. and the solar power systems are periodically maintained.

RO Maintenance

• In the institution, drinking water is purified by modern treatment technology using Filtration, Ion exchange and Reverse osmosis. R.O. plants are in operation to cater the drinking water needs of all the students, staff members, supporting staff and the visitors.

Bio Gas

• Bio gas, the naturally formed bio fuel is generated from Organic matter through Anaerobic Digestion. In a way to contribute towards the nation's energy saving plans, the Institution has constructed its own Bio-Gas plant in the campus. The gas generated is used for cooking purposes in Ladies Hostel and it also helps to recycle the waste to control methane pollution.

Sewage Water Maintenance

• Sewage water treatment plant in available in the institution with an input of 1.5lks Ltrs/day and output of 1lakhs Ltrs/day which is used to maintain greenery of the institution.

Fire Protecting System Maintenance

• Fire Fighting/Protecting System is mounted/installed all over the blocks, where Fire extinguishers and wall-mounted fire hose reels with dry risers are maintained every two years and all other fire

30-11-2022 05:44:12

safety equipment are maintained as per the norms, and the extinguishers are visibly checked and used extinguishers are replaced with new one immediately. Also all the computing laboratories are fitted with smoke sensors/detectors to avoid firing from the power cables.

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

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 91.68

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

2021-22	2020-21	2019-20	2018-19	2017-18
1816	1884	2228	2724	3508

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Upload any additional information	<u>View Document</u>
Institutional data in prescribed format	<u>View Document</u>
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document

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

Response: 21.42

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

2021-22	2020-21	2019-20	2018-19	2017-18
379	544	595	647	598

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

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

Response: A. All of the above

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

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

Response: 89.4

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

2021-22	2020-21	2019-20	2018-19	2017-18
3146	2288	1097	2383	2430

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

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

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

Response: A. All of the above

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

5.2 Student Progression

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

Response: 51.64

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

2021-22	2020-21	2019-20	2018-19	2017-18
232	345	435	546	654

File Description	Document
Upload any additional information	<u>View Document</u>
Self attested list of students placed	<u>View Document</u>
Details of student placement during the last five years	View Document

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

Response: 18.44

5.2.2.1 Number of outgoing student progressing to higher education.

Response: 90

File Description	Document
Upload supporting data for student/alumni	<u>View Document</u>
Details of student progression to higher education	View Document

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

Response: 50.22

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

2021-22	2020-21	2019-20	2018-19	2017-18
18	18	22	11	17

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

2021-22	2020-21	2019-20	2018-19	2017-18
37	33	31	37	36

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

5.3 Student Participation and Activities

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

Response: 252

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

2021-22	2020-21	2019-20	2018-19	2017-18
1	20	110	76	45

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

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

Response:

K.S.R. College of Engineering provides ample opportunities for the students to develop their leadership quality by involving them in the institution administrative bodies, committees, departmental associations and in the activities of the various cells. Students at all levels, i.e. first year to final years are having representations in all the activities. Collectively, the student's representatives in all the committees form an active student's council.

Students representatives in the Department Advisory Committee, have the responsibilities in the developmental measures of the department and hence that of the institutions.

Student's participations in class committee meetings bring out their problems in the teaching and learning process that helps the faculty to improve their content delivery. Students' grievances in the class are sorted out through class committee meetings.

Student's representations in Grievance Redressal cell, Internal Compliance cell Anti ragging Committee, Minority and SC/ST cell guarantees a viable platform to address and solve their problems / issues amicably. They also host awareness sessions among the students on prohibiting, preventing, and banning ragging menace on and off the campus, in line with directives of the honourable Supreme Court, UGC, AICTE and state government.

Hostel and canteen committee monitor the quality of food and hygiene aspects of food and invite feedback from their peers and putforth before the authorities for corrective measures.

Students participation is vibrant in their departmental Technical associations and professional bodies like (ISTE, IEEE, SAE), PALS, Alumni Associations, Training & Placement. They are given good opportunities to exhibit their leadership qualities and organising state level symposiums and activities of professional bodies.

Cultural and sports committees cater to their personal value such as leadership, commanding respect, comradeship, sportsmanship celebration of togetherness and each other's success.

Through Training and Placement cell, they bring out there needs to become job ready. students participation as representatives in women empowerment cell, Green club, eco club, music club, Swachh Bharat, Unnat Bharat Abhiyan etc., help them to understand universal human values and develop their personality.

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

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

Response: 10.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
9	2	12	16	12

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

5.4 Alumni Engagement

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

Response:

The Institution has a registered Alumni association to strengthen the comradeship and network to act as a bridge between the students, management, faculty and alumni of K.S.R College of Engineering for mutual benefit to build a better interaction among the alumni, students and faculty and to improve the quality of service offered to students that in turn will contribute to the benefits of the society.

An interactive and user friendly alumni website https://ksrce.ac.in/index.php/alumini/create is also available for the alumni to register themselves and interact with the students.

The Alumni engage themselves in contributing to the college through various activities like delivering guest lectures, acting as chief guest for various events at the college, mentoring junior students and acting as Board of Studies members and expert members apart from providing industrial and placement linkages.

Apart from formal alumni association meetings, the institution also engages the alumni support in many ways such as collecting suggestions, feedback on existing curriculum, updates on emerging trends, etc through various networking platforms like mail, Whatsapp, etc.,

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

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

Response: C. 5 Lakhs - 10 Lakhs

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

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

Vision

We envision to achieve status as an excellent educational institution in the global knowledge hub, making self-learners, experts, ethical and responsible engineers, technologists, scientists, managers, administrators, and entrepreneurs who will significantly contribute to research and environment-friendly sustainable growth of the nation and the world.

Mission

- To inculcate in the students' self-learning abilities that enable them to become competitive and considerate engineers, technologists, scientists, managers, entrepreneurs, and administrators by diligently imparting the best of education, nurturing environmental and social needs
- To foster and maintain a mutually beneficial partnership with global industries and Institutions through knowledge sharing, collaborative research, and innovation

The Vision of the institution envisages to

- Impart quality education
- Produce competent graduates
- Promote Research and development

In line with the above Vision, the structure of governance is formulated to include all the stakeholders to achieve the Vision and Mission.

Nature of Governance

The institution follows an autonomous and participatory mode of governance involving all stakeholders actively in its administration. The Governing Body delegates authority to the Chairman/Managing trustee and the Principal. The Principal shares it with the Heads of Departments, Administrative Officer, Coordinators / Conveners of various cells and Committees.

IQAC of the institution plays a key role in the preparation of strategic plan to implement quality education.

The Research Advisory Committee of the institution formulates the research policy to promote research and development.

Perspective plan

The Management is assisted by Governing Council of the Institution, which takes over the planning and

Page 84/130 30-11-2022 05:44:12

execution of various activities. The action plans are formulated in line with quality policy under the leadership of Principal and the same are incorporated into strategic plans for effective implementation.

The policy statements and action plans are tuned up for attaining the Vision of the Institution. Meetings with all stakeholders are conducted periodically to receive their feedback for implementing the action plans. All aspects of the teaching, learning and evaluation process are assessed through course coordinators, module coordinators, programme co-ordinators, Board of Studies and Academic Council meetings.

Participation of the faculty

The Principal, HoDs and senior faculty members plays a key role in framing various policies and strategies for proper academic, administrative and financial management of the Institution. Faculty members at all levels are nominated as members to the Governing Council, Academic Council and BoS.

The Principal conducts periodic meetings with HoDs and coordinators / Conveners of various committees to review outcomes from the implementation of action plans and make necessary corrections, if required. The minutes of meetings of the Principal with HoDs bearing the decisions taken and plans made at the administrative level in implementing the quality policy are circulated to the faculty for effective implementation.

Faculty are designated as programme coordinator, module co-ordinator and course co-ordinator at departmental level for effective implementation of outcome based education and monitoring continuous improvement. Faculty are appointed as co-ordinators for time table, BoS, Exams, T&P, R&D, Academic Audit, Budget Preparation, Laboratories, Cells & Clubs, Professional bodies and Mentors.

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

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

Response:

The Institution is keen in promoting a culture of decentralized governance system for its growth. The Head of the Institution is empowered with full autonomy for overall monitoring of administrative and academic activities to cater to the Institution's Vision and Mission. The roles and responsibilities of decentralized administrator's /decision makers are listed below:

Administrative Autonomy

Administrative autonomy is decentralized to the Principal, HoDs, Administrative Officer, Cell Coordinators and heads of various Committees as described below for better governance.

IQAC Autonomy

IQAC Coordinator has the autonomy to make modification / implement and systematize the efforts and measures towards academic excellence. IQAC conducts academic audit, analyze, suggest measures for the desired outcome.

Financial Autonomy

Finance committee constituted by the Principal is given autonomy to take decisions related to planning, implementation, and management of all financial resources. It reviews the funding pattern, provides guidelines and strategies for mobilizing resources to support the implementation of Institutions strategic plan for the fulfilment of vision and mission.

Academic Autonomy

The BoS, Academic Council and Department Advisory Committee are empowered to design, implement and monitor the curriculum, syllabi and assessments. Autonomous section follows the implementation of curriculum, and the system of assessments, to maintain the quality.

Examination Autonomy

Controller of Examinations (CoE) is responsible for the announcement of Examination Time Table, Preparation of Question Papers, Conduct of End Semester Examinations, Evaluation of Answer Scripts, Declaration of results and Issuing of Grade Sheets. CoE has the autonomy to recommend the list of qualified students to the Anna University for the award of Degree.

Student Autonomy

Students are assigned individual responsibility like Class representatives, Class committee members, members in BoS, Co-ordinators for co-curricular and extra-curricular activities and college events. They are given opportunities to put forth the requirements in the meeting.

Case study: Curriculum Design Process

Involvement of various committees and their roles in the process of designing curriculum are described below.

Program Assessment Committee (PAC)

- PAC monitors the activities of department and suggests ideas to reduce the curriculum gaps in achieving PO's and PSO's
- Evaluates program effectiveness and prepares the content of all courses as per the stakeholder's suggestions
- Measures the extent of adherence to planned activities and calendar of events.

Department Advisory Committee (DAC)

• DAC suggests the new programs, introduction of advanced courses in the curriculum,

establishment of new labs and skill up gradation of students based on the requirement of industries

• The committee develops and recommends new or revised goals and objectives of the program inline with the changes in technology

Board of Studies (BoS)

BoS reviews and approves Programme structure, Curriculum & Syllabi designed to cater to the needs of students and stakeholders

Academic Council (AC)

Academic Council discusses and ratifies the institute level academic issues such as academic calendar, Curriculum and Syllabi, Assessment of internal marks, End semester result analysis, Admission, etc.,

Governing council (GC)

Governing council discusses and approves all the Academic and Administrative activities of the college such as Result statistics of End Semester Examination, Finance committee meeting proceedings, Students intake/ admission, Faculty recruited/ relieved, etc.,.

File Description	Document	
The Description	Document	
Any additional informatiom	<u>View Document</u>	
Link for additional information	View Document	
Link for strategic plan and deployment documents on the website	View Document	

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

KSRCE evolves its strategic plan based on its SWOT analysis, stakeholder's feedback and its need to meet competitive environment among the institutions. The long-term strategic plan is revised once in five years and the short-term plans are revised once in a year. The long-term strategic plans envisioned in 2015-2020 are,

- 1. Strengthen outcome based education.
- 2. Promotion of research and development.
- 3. Strengthen industry-institution interaction.
- 4. Improving the position in ranking in NIRF,NAAC and Accreditation.

Case study on strategic perspective plan.

Promotion of research and development is taken for the case study report

The institution has established a well-defined research policy to motivate faculty scholars and students to take up research work in their desired career path and implemented through the Research Advisory Committee (RAC).

Research policy

- Seed money for projects that are socially relevant and industry applications
- Stipend of Rs. 10,000 for full time research scholars
- Special allowances on completion of doctoral degree
- Scholars on completion of PhD may be considered for Junior Research Fellow (JRF) / Senior Research Fellow (SRF) for funded projects
- Incentives for faculty on getting the grants from funding agencies
- Financial assistants for testing sample required for research
- Financial assistants for patent filing of the research outcome
- Administrative flexibility to carry out research
- Financial assistance for attending FDP, Conferences/Workshop
- Library resources Books and journals for research.

The research policy and its implementation are deployed through the institution research advisory committee. The research advisory committee is constituted by the principal with a chairman, member secretary and three or four of faculty members and external experts

Roles and responsibility of the Research Advisory Committee (RAC)

The primary function of the RAC is to contribute towards encouraging, guiding and monitoring the research activities of the faculty members, research scholars and students in the college and executing sponsored research projects.

The objectives/Roles of RAC are to,

- Promote research among the staff
- Disseminate information regarding research projects from various funding agencies
- Identify thrust areas for research
- Review the research proposal and their viability
- Guide the research scholar to develop the study design and methodology
- Periodically review and assist in the progress of the research work.
- Provide guidance on writing research papers for publications
- Review the progress of the research work and provide suggestions
- Provide guidance in preparing proposal for funding agencies
- Check plagiarism

Data to support the case study

The deployments of research policy and involvement of RAC have yielded success in promoting research and development in the institution. The table below shows the improvement made in R&D activities and implementation of research policy over the last five years.

YEAR	2021-2022	2020-2021	2019-2020	2018-2019	2017-2018
Number of Researchers	23	22	12	8	37
registered for Ph.D					
Number of Researchers	20	23	20	16	12
completed Ph.D					
Number of publications	74	104	166	138	127
Number of patents filled	15	15	19	11	17
Number of patents granted	8	3	-	_	_
Seed money granted	Rs.11,17,570	Rs.6,64,759	Rs.6,98,265	Rs.5,32,443	Rs.4,38,560

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

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

Response:

Functioning of the various institutional bodies

To achieve the goals and objectives of quality education, the Institution has defined policies and procedures for administration, with constituted institutional bodies, of which the Governing Council is highly authoritative. The Chairman of the Governing Council is the Chairman cum Managing trustee as per norms. The Principal is the member secretary of the Governing Council. He is the academic and administrative head of the institution and holds power to access and intervene as decisive authority of the administrative and academic councils.

Administrative set-up

The academic administration is preceded by the Principal, Heads of the various department and followed by the faculty members. Wherein all the Institutional matters are discussed with this composition for their instinct, guidelines and ensure the preparedness before implementation. Heads take charge and handle the Faculty, non-teaching staff and students for any matter and takes the message to the principal.

Academic Bodies

The Academic Council and Board of Studies which are Statutory Bodies of the autonomous institution takes essential monitoring on the curriculum, Programme to be implemented, courses to be included, syllabi improvisation and all amendments related to National policies for education.

Other institutional bodies

The Institution has all essential Statutory Bodies / Committees with experienced members from all walks of life, to take decisions for execution through other non-statutory committees. The management has been extending its unfailing support to meet all the requirements in terms of human resources, financial management and infrastructure development.

Appointment procedures

Faculty / Staff appointments are made based on the needs and as per the AICTE / UGC norms to maintain a better Student Faculty Ratio.

Advertisements are released for appointment of faculty / staff in the website, social media and in leading dailys.

The resumes received are scrutinized by the HoDs and suitable candidates are called for interviews by the Selection Committee. The Selection Committee consist of the Principal, HoD and subject experts. The recommendation of the Selection Committee is placed before the Governing Council for approval and appointment.

Service procedures

The service rules are framed by the Principal as per the AICTE norms in consultation with the Management and approved by the Governing Body. The service rules are made available in the Institutional website. The faculty shall conduct Lecture, Lab, Tutorial, Seminars and attend all other academic, co-curricular and extracurricular activities assigned to them and to the best satisfaction of the students and superiors. Also, the faculty shall work with fullest co-operation with others in the departments ensuring excellent working atmosphere. Promotion to a higher cadre depends on experience, teaching, research and satisfactory academic and related activities in the Institution.

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

6.2.3 Implementation of e-governance in areas of operation

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

Response: A. All of the above

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

6.3 Faculty Empowerment Strategies

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

Response:

The Institution strongly believes that the state of wholesome health and wealth of employees can reflect in their work efficiency and dedication. Hence, the Institution has taken up immense responsibility on taking care of their well-being and created possibilities for both the teaching and non-teaching staff.

Health

- Faculty members and non-teaching staff avail medical facilities for both general and dental health in the Dental College Hospital run by the management
- All members of faculty and supporting staff were provided with group insurance facilities to support them at needy time
- Yoga and meditation classes are conducted to enrich their mental and physical health
- Female staff and faculty can avail maternity leave for a period of six months

Avenues

- Faculty members are provided with congenial work environment
- Faculty members are given free transportation facilities
- Free accommodation and food with subsidized cost is provided to both teaching and non-teaching staff who are assigned with special duties in the hostels of the institutions
- Faculty / staff also can avail quarters/hostel within the campus
- Providing infrastructural facilities for doing research and consultancy
- Faculty members and staff working hours are as per the norms; library staff members are working in shifts since the library is opening from 8.00 am to 8.00 pm
- Summer and Winter Vacations for faculty and staff members
- Amenities like canteen, gym, post office, swimming pool, bank & ATM, RO water, stationary store are available inside the campus
- Faculty are provided computer system with internet facility

Wealth

- Faculty / staff can avail salary advance if any necessity arises
- The Institution follows the pay band as per the norms and revise them at every stage of their career growth in terms of experience, contribution, skills and responsibilities.
- The Institution is also facilitating its employees to avail loan from Provident Fund and gives reference to avail loan from the salary credited bank for their needy
- Every year during Sports Day celebrations separate events were conducted for faculty members both for men and women and rewarded with prizes.
- Faculty and staff can avail 25% fees concession for their children in the school and college run by the management.
- Seed money provided for faculties to encourage them to undertake research projects
- Special allowance of Rs.10,000/- provided to the faculty with Ph.D. qualification.

Career development

• The Institution provides On Duty and financial support to faculty and supporting staff undergoing training programmes, attend seminars, symposia, conferences, workshops at national and international level.

File Description	Document	
Any additional information	View 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: 43.49

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

2021-22	2020-21	2019-20	2018-19	2017-18
72	63	99	132	144

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

6.3.3 Average number of professional development / administrative training Programmes organized

Page 92/130 30-11-2022 05:44:12

by the institution for teaching and non-teaching staff during the last five years.

Response: 4.6

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

2021-22	2020-21	2019-20	2018-19	2017-18
5	6	6	5	1

File Description	Document	
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document	
Reports of Academic Staff College or similar centers	View Document	
Institutional data in prescribed format	<u>View Document</u>	
Any additional information	View Document	
Link for additional information	View Document	

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

Response: 57.4

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

2021-22	2020-21	2019-20	2018-19	2017-18
109	119	131	145	158

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

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The Institution has established mechanism for conducting internal and external audits on the financial transactions every year to ensure financial compliance. KSRCE follows all statutory requirements for audits and accounting practices. Internal audit is conducted by the financial committee of the institution. The committee thoroughly verifies the income and expenditure details and the compliance report is submitted to the Management through the Head of the Institution. External audit is conducted once in every year by an external agency.

Process of the internal audit

All vouchers are audited by the financial committee on yearly basis. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers. If any discrepancy is found, the same is brought to the notice of the Head of the Institution.

Process of the external audit

The accounts of the Institution are audited by chartered accountant regularly as per the government rules. The Institution has appointed statutory external auditor Mr. K.Selvaraj (M. No.029260) to audit the accounts once in a year. Discrepancies during the audit are discussed and sorted out with the supporting documents.

Audit procedures

- 1. Sources of Income Verification
 - Auditor cross verify the fee collections and scholarships with approved list of students and other incomes with the receipts issued to the students.
 - Fee amount receivable and amount received are reconciled.
 - The Received Grants are checked.

2. Expenses Vouching

- The payment of vouchers are audited by Internal Auditors (Recurring and Non-recurring) with relevant Invoices and Bills
- Correctness of revenue classification and capital expenses
- Reconciliation of bank accounts and checking the bank confirmations
- Calculation of depreciation of fixed assets
- Status of the old debit/ credit balances
- Salaries payment with the salary statements
- Checking of statutory dues payment like PF, TDS, and ESI
- Any other statutory compliances verification required as per Income Tax Act
- Any queries, in the process of audit are attended immediately along with the supporting documents
- Once all financial transactions are accounted, balance sheet, Income and expenditure statement for the financial year are prepared
- Based on the audited financial statements, auditor issues the Audit Report

Mechanism for settling audit objections

During audit, the queries raised by the chartered accountant are addressed by the finance committee. Explanation to the queries has to be given within 15 days time and rectification entries are done within 10 days. Auditor reviews the audited financials, and after discussion with the Management, signs the financials, before filing returns with the Department of Income Tax.

The Institution has not come across any major audit objection during the preceding years. However, areas of improvement are suggested by the auditor for implementation in the subsequent years. Typical suggestions that were discussed in the preceding years are:

- Expenditure over Income
- Cost optimization
- Too much unexpected expenses need to be avoided
- Avoid cash dealing
- Avoid Purchasing without approval of Purchase Committee

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

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

Response: 0

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

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Annual statements of accounts	<u>View Document</u>
Link for additional information	View Document

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

Response:

The Institution has well-defined financial structure to ensure effective and optimal utilization of resources for academic, administrative, development and maintenance purposes.

Finance committee

The Governing Council and the Finance Committee of the institution takes decision on financial and related matter. Financial Committee, nominated by the Principal has the responsibility for planning, implementing, and managing all the financial resources. It reviews the funding pattern, provides guidelines and strategies for mobilizing resources to support the implementation of the Institutions strategic plan, and the fulfilment of its Vision and Mission.

Fund mobilization

Broadly, major internal resource mobilization is in the form of Academic Receipts (Admission fee, tuition fee, examination fee, etc.,). Meanwhile, the external sources of finance are research grants, scholarships, consultancy, revenue collection in the form of deposits (loans from banks) etc., to meet expenses.

Fund raising

It is obvious that each activity/ every person involved in fund raising activity on behalf of the Institution should obtain written permission from the Head of the Institution. In all cases, funds must be collected through Cash/ Cheque/ Demand Draft in favour of The Principal, K.S.R. College of Engineering, Tiruchengode or by online transfer to the official account of the Principal.

Fund allocation

During the budget preparation, all the academic, department heads and various cell in-charges are requested to provide the annual budget requirements keeping in view of development and updating of laboratories, consumables, computing facilities, library, teaching-learning process, training, extension

Page 96/130 30-11-2022 05:44:13

activities, software and etc., Finance committee will meet to deliberate the proposal and makes necessary changes for proper balance of receipts and expenditure. Also, committee ensures optimum utilization of available financial resources.

Fund utilization

Financial Committee keeps track of the budget throughout the year and confirms adequate resources are spent for teaching-learning practices, salary and wages, library facilities, day-to-day operational and administrative expenses, maintenance charges, purchase / up-gradation of laboratories equipment, etc., Optimum utilization of fund for purchase is ensured by the Planning and Purchase Committee. In any unforeseen circumstances, additional budget is allotted depending on the merit of the case.

Audits

Internal and external audit are carried out promptly and audit objection are taken care of.

Optimal utilization of funds is ensured by

- Allocating adequate funds for effective teaching-learning practices including conduct of FDPs, workshops, conferences, inter-disciplinary activities, and consistent up gradation of laboratories, R&D, library and sports facilities.
- Effectively utilizing the grants received from external funding agencies and procuring state-of-the art equipment for project implementation. It can be utilized by the students and faculty for R&D and product development.
- Utilizing funds to meet day-to-day operational and administrative expenses and maintenance of the fixed assets.
- Providing adequate funds for development and maintenance of infrastructure.
- Allocating sufficient funds for social service activities as a part of ISR.

Experience in budget utilization during past years helps out in efficient budgeting and optimal utilization of the financial resources.

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

6.5 Internal Quality Assurance System

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

Page 97/130 30-11-2022 05:44:13

(second and subsequent cycles)

Response:

Example 1: INSTITUIONALIZING QUALITY ENHANCEMENT INITIATIVES

K.S.R. College of Engineering has established Internal Quality Assurance Cell (IQAC) for the quality enhancement and sustenance of Academic improvements prescribed by the NAAC. IQAC has been an integral part in developing a system for conscious, consistent and catalytic improvement in the overall performance of the College. The IQAC is committed towards internalization and institutionalization of quality enhancement initiatives in higher education. It helps the institution in planning and monitoring. IQAC interacts with stakeholders including Students, Teachers, Parents, Alumni and Community, a cross-sectional participation in the institution's quality enhancement activities.

The IQAC takes various initiatives to ensure incremental improvements of quality and its sustenance in all events of academic activities such as,

- Teaching Learning Process Outcome based Education
- Innovative and Modern Technologies in TLP
- Faculty and Student skill development
- Research and Innovation
- Training and Placement
- Career Guidance
- Submission of AQAR to NAAC
- IIQA and SSR submission to NAAC
- NBA / NIRF Accreditation process
- Feedback analysis and Remedial measures
- Institutional Innovation Council

Example 2: TEACHING LEARNING PROCESS - OUTCOME BASED EDUCATION

The departments of KSRCE are accredited by NBA with parameters contributing to outcome-based education. Student success is measured in terms of skills acquired in the courses of a programme. Each course has outcomes which states the skills to be acquired by the students upon completion of the course namely the programme outcomes (POs) which are to be assessed at the end of the programme. The course outcomes (COs) are mapped to programme outcomes as they strongly contribute to the attainment of the POs. Direct and indirect assessments are carried out to measure the attainment of POs and COs.

The continuous internal assessment and the semester-end examinations contribute to the direct assessment methodology. The course-end survey records, exit-survey records, placement records and employer feedback are used for indirect assessment. The attainment of course outcomes is recorded for each semester and necessary follow-up action is taken if any of the course outcomes is not attained.

The programme outcomes are assessed and subsequently follow-up action is taken where required. To substantiate the attainment of COs and subsequently POs, the question papers of internal assessment tests and semester end examinations follow Blooms Taxnomy levels with emphasis on higher order thinking questions. The question papers follow Bloom's Taxonomy to cater to different levels of student thinking skills. Both for the internal assessment tests and semester end examinations, the questions papers

are scrutinized for the quality by the heads of the departments and senior professors.

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

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

Response:

INTERNAL AND EXTERNAL AUDIT SYTEM

The primary responsibility of the Internal Quality Assurance Cell (IQAC) is to work towards the continuous improvement of quality and achieving academic excellence. This involves regular reviews of the existing processes, analysis of feedback received from the students, faculty, parents and different stake holders for the developments of the Institution.

Academic Audit is an integral part of the dynamics of higher education to achieve and maintain academic excellence. IQAC believes that Academic Audit provides an opportunity for regular strategic overview of teaching learning process (TLP). The internal Academic Audit is conducted by IQAC and analyse for key performance Index. IQAC suggests corrective measures and actions are carried out.

IQAC is responsible for developing quality benchmark parameters for various academic activities of the institution. The internal auditing comprises the following components:

- Lesson plan/Time table
- Log book with CO/PO mappings
- Attainment levels of COs & POs
- Faculty Contributions (Publications, Patent, Conferences, Work shop and Symposiums)
- Students Skill Development activities
- Industrial visits / In plant training
- Professional Society Activities
- Mentor Register
- Statutory bodies and the proceeding (BoS, Academic Council)
- Documents maintained in the Departments, Laboratories and Central Library

The senior most faculties are assigned to conduct audit, faculty member is provided with a copy of academic audit form for the purpose of auditing. Audit committee report is sent to concerned department Heads for the action to be taken. External Audit is conducted by a team of Professors from reputed

Institutes. The institution also conducting Academic and Administrative Audit (AAA) covering academic, administrative and student centric activities of the College.

INNOVATIVE AND MODERN TECHNOLOGIES IN TLP

The students' potential for learning is improved by the usage of Information Technology. Faculty employs Modern Technology tools for various academic activities; online classes through Google Meet and Microsoft Teams. Modern audio-visual tools are employed in lecture mode. Power-point presentations, internet resources and animation clips are displayed using LCD projectors during lecture delivery. The use of well-known online learning platforms like NPTEL, Coursera, and Udemy are encouraged both for faculty and students. Faculty also created online tutorials on various subjects and posted them on the YouTube platform for the benefit of the students, to easy understanding and practice.

Google classroom platform is used to manage and post the course related study materials, assignments, quizzes and evaluations. Quizizz is a platform for gamifying student participation tool that is used to design class, group, and pop quizzes as well as pre-test review. Students can learn to code in a variety of languages with Hacker rank, including C, Python, Java and many others. IIT Virtual labs are used to conduct labs through simulations. The faculty and students are using the various modern technology tools that are listed below.

1. Effective Teaching Tools

- Smart Classrooms
- Laboratories with software tools
- Google Classroom
- Google Meet
- You Tube Videos

2. Online Assessment Tools

- Google Forms
- Quizzz.com
- Terv Portal
- Loop Portal

3. Self Learning Tools

- Hackerrank
- Guvi
- Codingbat
- Leetcode
- IEEE Xplore
- Springer
- Elsevier

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

6.5.3 Quality assurance initiatives of the institution include:

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

Response: All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	<u>View Document</u>
Paste web link of Annual reports of Institution	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

The institution has a functional frame work to promote the level of technical skills and life skills among the Women students from rural background. To promote gender quality various cells comprises of Grievances cell, Women empowerment cell, Anti Ragging, and Internal Compliance cell have been formed to adjudicate and to rise women empowerment in the institution and to look after the issues raised by the women on any gender inequality, discrimination and internal compliance. These cells promote friendly environment and better exposure to overcome shyness, fear and to voice out for their genuine problems. Remedial measures are taken once any compliant is raised by the girl student to the committees.

The measures initiated by the institution for the promotion of gender equality during last five years include:

- An Annual Gender Sensitization plan is published in the college website and awareness is created among the students.
- Women empowerment Cell organizes lectures, awareness programs and various competitions to motivate the young female students.
- In every class, one girl student is made the class representative. The girl students are encouraged to be top-level executives of various cells and clubs.
- To promote women leaders, the female faculties are appointed as HoDs, cells and clubs.
- Girl students are encouraged to participate in NSS and NCC. Their participation in NSS is around 30 - 40%
- Sessions on safeguarding the rights of female members are often conducted.
- Awareness programmes to underline the physical and mental health of women are organized regularly.
- The lack of knowledge and awareness about cyber laws results in youngsters getting trapped to cyber frauds; awareness talk about the Cybercrime defamation are conducted.
- Separate Ladies Buses are operated for safe travel of women.
- Hostel and college premises have 24 x 7 security support with CC TV surveillance cameras (40), along with 36 security guards at various locations round the clock.
- Anti-ragging Committee, Grievance Redressal Committee, Internal Compliance Committee and Disciplinary committee ensures safety and security in the campus for girl students and women faculty.
- Equal opportunities are provided to both gender students to participate in various curricular and co curricular activities without any bias.
- To encourage the girl students in curricular, co-curricular as well as extracurricular activities, KSRCE offers two special awards every year "Best Outgoing Student (Girl)" and "Best overall Sports Person (Girl)".
- Women Physical directors are appointed for coaching and accompany with them for the events.

"Constitution of India" is made as a mandatory course for all students in order to impart legal issues,

Page 102/130 30-11-2022 05:44:13

womens' rights and awareness on any gender discrimination, child abuse, dowry, female infanticide, and gender inequality.

The institution ensures women safety with code of conduct at hostel and in the premises. Facilities are provided for online leave application approval with the knowledge of the class advisor, HoD and Parents of the hostel students. Health safety is ensured with in house doctor service and 24/7 ambulance to reach multi-speciality hospital.

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

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

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

Response: A. 4 or All of the above

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

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

- Solid waste management
- Liquid waste management

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

Response:

SOLID WASTE MANAGEMENT

Campus Solid Waste Management program is implemented to segregate and recycle organic waste, paper, cartons, paper cups, soft drink tins, plastic, pet bottles, e-waste, biowaste, etc. Solid waste is segregated into degradable and non-degradable. All blocks are provided with dry waste collecting bins; waste collected every day is handed over to the concerned authorities. There are dustbins placed at specific points to prevent littering in the campus.

The college is striving to be a plastic free zone and in the process of establishing of vertical garden with the available waste pet bottles and making the campus eco-friendly and greenery. On campus use of plastic is discouraged. Plastic cups, metal tins and paper cups are banned in the campus. The hot beverages are served in steel mugs/glass. Awareness posters and pamphlets are displayed against use of plastics in prime locations of the campus.

Dry leaves are collected regularly and compost and used as manure for the gardens. Food/Vegetable wastes, human excreta and cow dungs are used as feed for digestion. The food and vegetable wastes are used for biogas plant in the campus.

Answer booklets, Old waste papers, and woodcrafts are sent to nearby paper and board industry for recycling. Paper consumption is considerably reduced in the institution by adopting digital mode in all walks of work.

Incinerator machine is installed to dispose sanitary napkins and separate bins are provided in Ladies Hostel to separate the napkins from other waste. Sanitary napkin incinerator with wet scrubber is installed for disposing the napkins.

LIQUID WASTE MANAGEMENT

Liquid waste collected from hostels, staff quarters and food courts are conveyed to the waste water treatment plant. The treated water is tested for its quality and is reused for gardening, street washing and landscape irrigation.

Sewage treatment plant of capacity 1,50,000 liters per day at a cost of Rs 49,50,000 has been established. A screening chamber and an aerator which supplies oxygen in the aeration tank for effective growth of microbes, secondary settling tank to remove the bio flocs and chlorination tank to destroy the pathogenic microbes in the treated effluent installed in the campus and maintained.

Water level detection sensors installed in water tanks reduce wastage of water and power consumption

E-WASTE MANAGEMENT

The E-waste management has been given due focus and all Electronic goods are put to optimum use, by separating the useful components to set right the minor/major repairs of other equipment by the professional technicians. Obsolete electronic items such as monitors, computers, batteries etc. are segregated and sold as scrap to the authorised vendors every year.

WASTE RECYCLING SYSTEM

The waste water originating from the bathrooms and toilets are collected by two-pipe system, where one pipe carries wastewater due to bathing, washing of clothes and cleaning and the other one carries human faeces and night soil. This system of collection facilitates proper and effective treatment and disposal of sewage. An average of 5000 cum/year is used for irrigating plants in the campus.

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

7.1.4 Water conservation facilities available in the Institution:

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

Response: A. Any 4 or all of the above

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

7.1.5 Green campus initiatives include:

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

Response: A. Any 4 or All of the above	
File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	<u>View Document</u>
Any other relevant documents	View Document

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

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

Response: A. Any 4 or all of the above

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

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: A. Any 4 or all of the above

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

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

Response:

K.S.R. College of Engineering caters to the inclusive environment with diversity in terms of culture, region, linguistic, communal, socioeconomic and other aspects through various co – curricular activities. All category of students are taken care to maintain social harmony by promoting various activities related to them. The ultimate harmony of the nation is attained based on the universal human values they learn and followed in every one's life. The process of value formation concerning the different stages of development and cultural highlighting contests the relationship between the individual and the society is promoted in the institution.

Efforts to handle Cultural diversity

K.S.R. College of Engineering accommodates the cultural diversity of students by encouraging them to exchange the cross cultural ideas and celebrations of the festivals of different culture and their values. Students from the other states are motivated to participate in the cultural festivals of Tamil Nadu. The cultural festivals greetings are exchanged by faculty and students during festivals like "Pongal – Festival of Harvesting", Onam, local festival Aadi Perukku are celebrated with traditional flavour. Faculty and students exchange greetings during festivals seasons of all religions; Ramadan, Bakrid, Christmas, Easter Sunday etc. The institution has committees to avert any kind of activity disturbing the communal harmony in the campus with zero tolerance.

The institution promotes values concern to be rooted in contemporary contexts on various social issues like gender equity and environmental sustainability are inculcated through, tree plantation drives, propagating saving of water, river beds, aquafers, clean India campaign, non-use of plastics campaigns. K.S.R. College of Engineering students conduct rallies to create awareness among public on all the above issues. Students have participated in cleaning places of important in and around the college.

Efforts to handle Regional diversity

K.S.R. College of Engineering always managing cultural diversity in religious differences. This includes schedule changes, dress code exceptions, and excused absences from programs that might be conflictive with the students and employee's beliefs.

The institution has put in place a zero-tolerance policy to handle misconduct and misbehaviour of students with ethnic graphs. These include offensive jokes about ethnicity, gender or religion, slurs and any other intentional abusive behaviours.

Efforts to handle Linguistic diversity

The institution always ensure culturally inclusive communication with employees and students in order to manage a diverse workforce. All procedures, safety rules, and other important information are designed properly in order to overcome the language barriers. Translating materials like symbols and pictures is fixed in important places to make everyone feel included.

Efforts to handle Communal diversity

The students and the faculty of all the communities and religions (OC -2.44%, BC-57.24%, MBC-33.7% & SC/ST-6.62%) are a part of the institution which shows that the institute strives to provide conducive environment for all. We are proud to report that there is no incidents and complaints of communal classes in the campus.

Efforts to handle Socio-economic diversity

The institution has taken initiatives to accommodate student from socio-economic groups by providing fee concessions and scholarships in admitting students under management quota.

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

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

Response:

The values are inculcated through courses in the curriculum, namely Universal Human Values, Professional Ethics and Constitutions of India. In addition, Yoga programs are organized to make our students to understand the value of being humane. Through NSS and NCC various programs are organized to make the students realize their rights, duties and responsibilities.

Awareness programmes are conducted to make the students to understand the constitutional responsibilities and disseminate to others about importance of voters right and their responsibility in selecting the right government. The constitutional obligation of unity in diversity is practiced in the campus and students are informed about it often.

Students take oath on National Unity Day on October 31st and National Voters Day on January 25th every year.

The institution motivates the students to participate as volunteers in election duties to help the government to increase the polling percentage of responsible voters.

The institution creates awareness among student community about how rights and duties play an important role in their professional life in the development of the Nation and on the growth of an organization. Further a graduate's responsibilities during every graduation day are listed out and pledge is administered by the head of the institution.

The various programs organized are:

- To propagate the duties among people that planting the trees helps to maintain clear eco-friendly environment. The events like tree plantation drives and marathon are organized.
- Blood donation camps by NSS and NCC along with government hospitals in Tiruchengode and Erode in order to inculcate the social responsibilities.
- Women empowerment cell organize Anaemia awareness camps to students and faculties.
- Students are facilitated to enrol themselves for voter ID who turns 18 years of age, through online.
- Correction of voter ID and training to students to enroll for voter ID through online are organized to make the students to be aware of their rights and duties.
- Village adoption programs under NSS and UBA (Unnath Bharath Abhiyan) have provided a platform to understand the lively hood of villagers.
- During pandemic and natural disasters, students are permitted to collect funds/materials and distribute them to the affected people and they are taken to orphanage and old age homes to inculcate social responsibility through contributions.
- Independence Day, Republic Day and Constitutional Day are celebrated to inculcate constitutional values among students about our Constitution, freedom struggle and our nation's history.
- Though Student Skill Development Cell, the achievers in various walks of life are invited to provide motivational talks to share their experiences, which makes them to be positive and their responsibility to revert back to the society.
- Clean India Programme is periodically organised in association with NCC to aware students and employees about the Indian government Swachh Bharath Mission and the students are encouraged to take short film named "My contribution towards making India Clean".
- Rally on International Drug abuse Day is organized to make aware of the Students and Public about the effects of Drug in human life.

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

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

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

Response: A. All of the above

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

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

Response:

Our Institution has students from different parts of India. The Institution does encourage multicultural celebrations in the campus.

National and Regional Festivals

National and Regional festivals are celebrated with enthusiasm and traditional flavour. The cultural, ethnic and religious diversity in India has given rise to myriad festivals that are celebrated with unparalleled enthusiasm by students of KSRCE.

Here is the list of festivals celebrated in the campus:

- "Pongal" a festival of farmers is celebrated with traditional flavour.
- Our College Celebrates Holi Festival as a way to welcome the spring.
- Eid al-Fitr is celebrated as a part of Ramadan. The festival is celebrated in order to renew their focus on spiritual life.
- Onam is celebrated in the campus by keralites along with local students
- The institute celebrate Ayudha Pooja to honor and express gratitude for all the instruments that add meaning to our life.

National and International Commemorative Days:

- We celebrate the republic day with great ardor to recognize the constitution of the country on 26th January 1950. The celebration includes the hoisting of national flag and spreading a warm message of nationalism by eminent personalities.
- Women's Day is celebrated on 8th March to recognize the women achievers
- INTERNATIONAL Yoga day is celebrated on 21st June to promote yoga among students. Yoga Practioners and experts are invited to address the faculty, staff and students.
- On 15th August, we celebrate the Independence Day to emphasize national integration and preserve the rights of an individual and to remember national leaders and their sacrifices.
- 5th September is celebrated as Teacher's day, the birth anniversary of Sir Sarvepalli Radhakrishnanan, to honour the great services of teachers.
- 15th September is celebrated as Engineer's day, which is the birthday of Sir. Mokshagundam Vishweshvaraya to recognize his services as a great engineers and to commemorate the great works of engineers.
- Our institute celebrate every year on 2nd October to understand the ideology of our father of nation Mahatma Gandhi wherein pledge about "Make India clean and neat" is taken by all students.
- The college conducted a massive tree plantation campaign on 15th October to mark the birth anniversary of Dr. APJ Abdul Kalam.
- National Education Day on November 11 is celebrated to honour the birth anniversary of Shri. Moulana Abdul kalam Azad with a guest lecture.
- Martyrs' Day is observed on January 30th in remembrance of the assassination of the Father of the Nation Mohandas Karamchand Gandhi by observing 2 minutes silence in all class rooms.
- National Youth Day on January 21 by sharing greetings by Swamy Vivekananda and his lecture in Chicago is shared to all students.
- Apart from these nationally important days, UNO Day, Cancer Day, Energy Conservation Day, and Environment Day are also observed on October 24, February 2, December 14 and June 5 respectively.
- The birth anniversary of Dr. Srinivasan Ramanujam is also celebrated on December 22 as Mathematics Day by conducting quiz competitions.

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

7.2 Best Practices

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

Response:

Best Practice-1

1. TITLE OF THE PRACTICE : GO GREEN ENVIRONMENT PRACTICE

2. OBJECTIVES OF THE PRACTICE

The institution binds to focus on clean and Green Environmental practices that aims at achieving ecofriendly atmosphere in the campus.

The main objectives are listed below:

- Expanding the greenery in the campus
- Initiating activities to protect the environment and to reduce carbon emission by using energy resources
- Effectively maintaining the solid waste and e-waste
- Minimization of waste generation and safe disposal of the wastes in campus
- Conserving recycled water in flushing and gardening system
- Conservation of electrical energy by implementing energy efficient system and solar panels.

3. THE CONTEXT:

- A clean and healthy environment aids effective learning and provides a friendly environment
- Optimum use of natural resources and keeping our environment clean and green are necessary for healthy living and sustainable future
- The stakeholder works to develop the campus by the concept of eco-friendly culture
- Awareness to leverage the latest technology in energy conservation and usage of best practice
- Effective use of recycled waste water in flushing system and irrigation
- Go Green (Swatch Bharat) Mission are the concepts evolved after realizing the harmfulness of pollution which affects not only human health and also the ecological balance.

4. THE PRACTICE:

- Policies related to green initiatives and waste management are established and implemented
- Use of paper cups and plates is encouraged and the use of plastic bags and plastic tea cups is banned. Plastic free culture is imbibed
- E-waste is maintained for safe disposal
- Waste water treatment plant is built to meet the water quality requirements
- Recycling of waste water and using it for gardening helps to reduce consumption of water
- Rain water harvesting facilities are made across the campus to harvest rain water and stored in bunds for ground water recharge. Monitoring of water levels in tanks and bunds are in practice
- Quality drinking water dispensing system with well-maintained RO Plant and filtering station
- The treated water is being stored in nearby water pond to increase the water table of local area
- Instead of using packed water in plastic containers, students are encouraged to use refillables like stainless steel bottles or glasses
- Steps are taken to reduce plastic pollution in the college campus with special focus on the reduction and elimination of plastic bottles, plastic straws, utensils and plastic food packaging
- Separate dust bins are provided to collect degradable and non-degradable wastes in solid, liquid and e-waste forms
- The concept of green campus campaign and environmental friendly practices in the campus resulted in maintaining a clean and green campus

Page 112/130 30-11-2022 05:44:13

- Workshops and seminars on environmental issues to create awareness among the students
- Eco-Club and Energy Conservation Club have succeeded in fostering an energy conservation culture and attitude among students, staff and masses in nearby areas
- Cleanliness programs conducted by NSS and NCC time to time
- Maintenance of garden and various play grounds by NSS and sports committee
- Encouraging the students and faculty to save electricity, papers, water and use of dust bins etc
- Environmental awareness program (single use of plastics awareness) conducted by NSS unit of the college
- "Vermi Composts" are being prepared in the college campus and are used as organic fertilizers
- E-waste, like electronic gadgets, mother board etc., are partially reused by the students to retrieve important electronic components for project works
- Availability of different sports facilities in the campus like cricket ground, football ground, basketball ground etc., encourages local people to make use of the available facility
- Fire safety pumps installed with integrated fire alarm in academic buildings

5. EVIDENCE OF SUCCESS:

- The campus has a green cover of about 60% and is a sanctuary to a variety of insects and birds
- The green campus developed by college helps not only to save the environment, but also adds to the beauty of the campus and create awareness among the students
- Besides harboring the people, plants are used for scientific studies
- Ban on plastic items, vermi-culture and vermi-compost has made college campus clean
- Eco-campus strategies employed resulted in beautiful and clean college in the vicinity. It has resulted in attracting more students
- The college generally does not generate any hazardous waste in any manner. However, the college strives to generate minimal waste and tries to reduce the use of plastics where ever possible
- Paper waste is sold off to vendors who send it for recycling
- Printer Cartridges are generally refilled and not disposed. Whenever refilling is not possible, the cartridges are returned to the manufacturer
- The college organizes periodical NSS camps to inculcate the values of plantation among the students and the faculty members
- Seminars and class room teachings are practiced to create awareness among stake holders for proper waste disposal
- Uses of plastic bags are discouraged in the campus
- The entire building of the institution is designed by the architect in considering the maximum utilization of the natural resources
- All the class rooms are well lit with natural light and well ventilated

6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED

- Financial resources are always needed to secure success in organizing these programs.
- Coordination from external agencies is required to put the theory in practice.
- Programmes with external agencies should be organized to let people of the area understand the importance of environment cleanliness and up gradation.
- Upholding the motivation level in voluntary work and ensuring the wholehearted involvement of volunteers in all the activities is also a problem which requires careful teacher supervision.
- Awareness programmes and carrying out door- to- door campaigns will also help to overcome the obstacles.

- Continuous efforts are required to create awareness and to sustain the GO GREEN policy. Organizing programmes related to this theme of practice amidst heavy academic schedule is necessary.
- More number of labours / workers are required for the establishment. Maintenance and retaining labours / workers of this category is challenging.

Best Practice-2

1. TITLE OF THE PRACTICE: SKILL DEVELOPMENT PRACTICES THROUGH PAN INDIA IIT ALUMINI LECTURE SERIES (PALS) - IITM

2. OBJECTIVES OF THE PRACTICE:

- The institution enables the students to be "Industry Ready" and meet the expectations of the Market, when they begin their career.
- Various offerings from PAN INDIA IIT ALUMINI LECTURE SERIES (PALS) are delivered by and with active collaboration from Faculty, Management and Alumni of various IITs, apart from domain experts from across the globe.
- To collaborate actively with IIT Madras Research Park / Start up incubation cells, TLC (Teaching Learning Center) RuTAG (Rural Technology Action Group), E-Cell etc of IIT Madras.
- To complete 360-degree intervention that PALS provide students with an exposure to the industry so that they are more confident in their engineering career.

3.THE CONTEXT:

- Skill is a kind of knowledge that requires ability, critical knowledge, creativity, practice and experience to perform a job successfully.
- The graduates find it difficult to be placed in companies since they lack in practical skills. The industry requires practical skills with supporting theoretical knowledge in their concern field.
- Understanding the need of the hour and to prepare ready-for-industry graduates, Skill Development Program was initiated at KSR COLLEGE OF ENGINEERING from 2016 batch.
- In the prevailing scenario of the demands of companies on new and emerging coding skills at a fast pace, it is imperative to consistently inculcate the students particularly aspiring for product and service based companies.
- With a view to equip and enrich the students to acquire the professional competency, PALS facilitates the students to develop their skill set.

4. THE PRACTICE:

- PALS offers a regular engagement with the students and faculty through a series of events conducted throughout the year with various activities. It features various events such as insightful general and technical lectures, Industry visits, Innovation Challenge Competition and various Workshops and Seminars for students as well as for faculty.
- Technology experts and eminent alumni are called upon to speak on technical topics of interest related to conventional engineering subjects like Mechanical / Civil / Chemical / Metallurgy / Electrical etc.
- Lecture sessions are followed by a highly interactive session with each college in the respective zone nominating a team of students who would research the topic, participate in a Q&A session

with the speaker and also make a presentation on their understanding of the topic.

- Target audience will be engineering students from first year to third year. The sessions are conducted in virtual mode for half a day.
- Technology experts and eminent alumni will be called upon to speak on technical topics of interest related to cutting edge and breakthrough technology subjects like Artificial Intelligence, Robotics, Data Science, Block Chain, IOT, VR & AR, Cloud Computing, 3D Printing, Nano Technology etc.
- The lecture sessions are followed by a highly interactive session with each college in the respective zone nominating a team of students who would research the topic, participate in a Q&A session with the speaker and also make a presentation on their understanding of the topic.
- There are case study analysis sessions for student teams from each college in a zone enabling them to focus on real life problem situations in industry. They discuss to analyze the case, define the problem and search for solutions which will hone both their quantitative and qualitative skills.
- PALS analyze gives an opportunity for a select group of students to think on their feet in a high pressure situation and make a presentation to a big audience.
- Theory to Practical (T2P) lectures create an awareness among the students to understand the theoretical concept with practical application in industry. This has been a huge and popular event for students and faculty alike.
- The lectures are usually conducted at IIT Madras by professors who treat an engineering problem as a case study and explain both the theoretical aspects as well as the practical application of the concepts. They are sometimes assisted by the presence of experts from industry who have used the application.

5. EVIDENCE OF SUCCESS:

- KSRCE is awarded by PALS for the most number of student's participation in skill development program.
- There is a steady increase in the number of participants in PALS, both students and members of faculty, year by year.
- An average of over 30 events is conducted every year by PALS.
- Students and faculty' actively participate in all the programs conducted by PALS and are much inclined to learn through various practical activities.

NUMBER OF ENROLLED STUDENTS REGESTERED IN PALS BY YEARWISE

S.NO	YEAR	NO OF STUDENTS REGISTERED
1.	2021-2022	280
2.	2020 - 2021	221
3.	2019 - 2020	384
4.	2018 - 2019	280
5.	2027 - 2018	120
6.	2016 - 2017	131

6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED:

Problems Encountered:

• The difficulty to meet the exact requirement that industry needs from graduates, to create

- infrastructure for practicing the skill training sessions for all the students and resource persons are employed from all domain areas to train the students.
- Establishing relationship and entering into MoU with reputed industries takes at least a year. Follow up activities to retain the partnership becomes a challenging one.
- Finding slots with industries for student /faculty training during summer and winter vacations and for field visits are becoming difficult.

Resources required:

- Industrial relations are required in each department in addition to central IIPC team.
- Students' pursuing their education aspire to get placed in their respective core companies. However, as per the current trend, the number of core companies come for recruitment is less when compared to software companies.
- The students of a few branches like ECE, EEE and Mechanical Engineering do not have computer papers in their third year. It becomes difficult for them to get placed in software companies. As our institute has industry certified faculty members in the departments of CSE and IT, they are utilized for giving special training to the students in the required areas.

OTHER BEST PRACTICES

I. NATIONAL SERVICE SCHEME (NSS)

The **National Service Scheme (NSS)** is a Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports. It provides opportunity to the students to take part in various service activities & programmes. The sole aim of the NSS is to provide hands on experience to young students in delivering community services. It makes the students be confident, develop leadership skills, and understand problems of mankind.

Every year, tree plantation program is organized to establish Eco Environment in K.S.R College of Engineering. Trees give us oxygen, shade, medicine, food, fruits, furniture, fuel etc. Trees also keep the weather cool and helps in rainfall. Trees are part and parcel of our life. So, it is our duty to plant more trees and take care of them in order to maintain balance between man and nature. To make the country economically developed and to save the globe from greenhouse effect, we should plant trees on a large scale.NSS unit is functioning with 100 student volunteers. This unit is conducting various social related activities in and out the campus. 'Tree Plantation' camp is executed by NSS student volunteers with the guidance of NSS co-ordinators and the Principal. This program is carried out in K.S.R College of Engineering campus. Yearly, 40 saplings are planted at an interval of 3 meters which were planted around 28 acres in and around the buildings and at vacant places regularly. Tree saplings are being collected from our KSR management's own nursery. Tree saplings like paradise, neem, bakula, champaka flower, portia and beech are selected and planting is carried out in the campus with proper water management system.

Tree plantation was carried out around the Library block on 30.07.2018 and around KSRCE Boys hostel on 01.08.2018. The same was done around Computer Science and Engineering Department block. College has its own waste water treatment plant and this treated water is reused for maintaining the plants. Even during covid pandemic period, KSRCE NSS unit encouraged the students to carry out tree plantation in their respective locations. About 50 students, public and police personnel were involved in this activity.

During this period, tree Plantation Program was conducted at different places like Dharmapuri, Krishnagiri, and Tiruchengode of Tamilnadu state. Saplings like coconut and banana plants were arranged by our student volunteers and plantations were made in these locations. Also, lawn and gardening work was done in Krishnagiri four roads police station. These volunteering works was appreciated by the public and Police department.

STUDENT LEADERSHIP STRUCTURE:

Principal -NSS Programme Officer -Assistant NSS Programme Officer - NSS Student Coordinator -NSS Student Volunteers

The main objectives of NSS are:

- Methods & Techniques of working with people.
- Self-Development and a sense of social and civic responsibility
- Utilize the gained knowledge in finding practical solutions to individual and community problems.
- Rural work under NSS.
- Urban work under NSS
- Afforestation & Tree Plantation.
- Non-formal education for rural youth.
- Swacch Bharat Mission.
- Acquire leadership qualities and democratic attitudes.
- Develop capacity to meet emergencies and natural disasters Practice national integration and social harmony
- Stage shows or a procession creating awareness of such issues as social problems, education and cleanliness
- Awareness Rallies
- Inviting doctors for health camps
- There are no pre-defined or pre-assigned tasks, it is left up to the volunteers to provide service in any way that is feasible. Camps typically last between a week and 10 days, although camps for shorter periods are also conducted by NSS.

II. NATIONAL CADET CORPS (NCC)

The **National Cadet Corps** (**NCC**) is the Indian military cadet corps with its Headquarters at New Delhi, India. National Cadet Corps is a Tri-Services Organization, comprising the Army, Navy and Air Force, engaged in grooming the youth of the country into disciplined and patriotic citizens. The National Cadet Corps in India is a voluntary organization which recruits cadets from high schools, colleges and universities all over India. The Cadets are given basic military training in small arms and parades.

Training process includes:

- Understand the community in which they work.
- Understand themselves in relation to their community.
- Identify the needs and problems of the community and involve them in problem solving.
- Develop among themselves a sense of social and civic responsibility
- Develop competence required for group-living and sharing of responsibilities.

- Regular activities in the weekly parades are Warm-up exercises, Drill, Rifle Drill, Lecture Class, Map Reading, Weapon Training, Field Craft and Battle Craft, etc, are being imparted to the cadets.Independence Day, Republic Day, Road Safety Rally, Anti-Drug Rally, Tree plantation, Blood Donation, Army Awareness Program, Collegiate/Inter collegiate NCC competitions and NCC Day celebration are the other programs conducted by our unit in which our college cadets will take part an activities and programs.
- The following events and activities were conducted by NCC students to promote the green environment in college.
- Every year 60 Cadets participated in the rally on Go-GREEN Environment on 26.06.2018 at Tiruchengode.
- 40 Cadets participated in Cyclone GAJA relief work at Puthukottai on 04.12.2018 to 06.12.2018.
- Clean India Program (Swachh Bharath Mission) mission was conducted at SPB Colony on 11.02.2019 over 100 Cadets participated actively in the programme.
- Tree plantation drive was organized at Parisilthurai on 20.02.2019 and 100 Cadets.
- Participated in the planting of saplings at Bhavani, Erode.

BEST PRACTICES

- 1. Excellent educational environment and teaching learning process.
- 2. Enriched curriculum with one credit and MOOC courses.
- 3. Infosys campus connects, Wipro Project Readiness Programme offered.
- 4. Industrial electives, Open electives and Professional electives.
- 5. Qualified Experienced faculty.
- 6. Anna University approved Research Centres.
- 7. Accredited by Wipro/TCS/Virtusa/.. for placement.
- 8. Well-equipped centre of excellence laboratories.
- 9. Memorandum of Understanding with premier Industries.
- 10. Exclusive Smart class rooms and Lecture halls with wall mounted LCD projector.
- 11. Excellent carrier guidance to meet global challenges.
- 12. Encouraging students to participate in Co-curricular and Extra-curricular events at National and International level.

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

7.3 Institutional Distinctiveness

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

Response:

Outreach Program for Government School Students

Moto of the college and background strength for Outreach

K.S.R. College of Engineering (Autonomous) is located in a rural area at Thokkavadi, Tiruchengode Taluk, Namakkal District, Tamil Nadu, India – 637215. Our First batch (2001-2005) completed their degree under Anna University, Chennai. We strive hard continuously, to achieve academic excellence in Science, Engineering, Technology, Management and Research. The college aims at producing the most competent Scientists, Engineers, Entrepreneurs, Managers and Researchers through, objective and innovative teaching methods, by dedicated and duty conscious faculty. The process improvement involves continuous and consistent updating of facilities, welfare and quality improvement of the faculty.

As envisioned in the vision of the institution, it is important to enhance the skills of students from the school level so that they can meet the needs of the skill set. For this purpose, we have arranged outreach programme for school students to know about the basics of engineering especially in the field of mechanical engineering. A Community Outreach team helps individuals in a community. The main purpose of this program is to raise awareness about the individual's skill set which empower them towards engineering that would benefit student community. This certification helps the students to obtain a job by proper mention of the program. This will inculcate their inner abilities about technical ideas to solve a problem. The program moulds the students to empower themselves in the fields of engineering and life sciences.

Objective of Outreach Program

The objective of the program is to encourage the school students towards specific interest in a particular field. Outreach programs for the government school students of Tiruchengode are organised to enhance their skill set. Permission from the head master is sought for the students to participate in the outreach program organised by our institution. The management provides us financial support for organizing these programs. For conducting this program, machining tools from Proxxon and cool tools such as are purchased, the cost of the machine tools from Proxxon is Rs 34,000/-.

Year of Initiation

The program was first started in the year 2009. The participants are from the 8th standard with strength of 15 - 20 numbers. We have initially organized classes on Saturdays and Sundays for a period of five weeks. Later on the program was conducted on weekdays possibly from Monday to Friday in a week. They were taught about the mechanism i.e working principle of components like cam and follower, joints etc. The classes were mainly based on wood working. In that, they were taught about the type of joints and machining processes like drilling and carving. In the morning session they are engaged with theory classes and in the afternoon session they are allowed to work in laboratory (hands on training). They are provided with free tea and snacks in both morning and afternoon sessions. Free transport facility was provided (college bus) for attending this program. At the end of the program, feedback from the student is collected and they were provided with the model - work done by them.

Detailed structure of the outreach program

Outreach programmes were arranged for students in week days possibly from Monday to Friday of a week.

First we have in auguration ceremony of this event. Each day of the morning session will start with lecturers. The lecturer area will be focused on basic mechanism, power plant, IC engines and application of embedded systems in automotive. After the morning lecture, a tea break is given for fifteen minutes. Followed to that, each day a video is played on mega factory at audio visual room in the Central library. After lunch break, afternoon session starts with Laboratory visit or Demonstration on Carpentry work, sheet metal work and basic auto components. The second session of the afternoon classes starts after tea break. The second session of the afternoon classes will be on library visit or hands on training on carpentry work and sheet metal work. The program is curtailed after a formal valedictory function.

Outcome of the program

Feedback from students on everyday activities is collected and documented. Moreover the programmes organized in our college for government school students of class VIII were very informative and the program created an interest on engineering especially in mechanical engineering. For the past five years, more than 80 individuals are benefited.

Outreach as a Continuous Process

Till date, the program is organised and has made a great impact on the school student who are basically from rural background. During the outreach program, the students are engaged with both theory and practical classes. This inculcates the learning process of engineering and life science in them.

File Description	Document
Any other relevant information	<u>View Document</u>
Appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information:

- Institutional Scholarship for meritorious students every year
- Incentives for Research outcomes, like IPR
- Special allowance on Completion of Ph.D.
- Free transport for faculty, staff and students
- Grievances Redressal System both for students and faculty
- Feedback mechanism for curriculum design
- Effective waste management system; Solid, liquid, e-waste
- The College conducts state/zonal level Inter-Collegiate sports events of Anna University
- Students of KSRCE are continuously participated in south zone/All India Inter University Kho-Kho
- Career 360 Ranking
- 1. Rated AAA in 2019-2020
- 2. Rated AA+ in 2020-2021
- 3. Rated AAA in 2021-2022
- CSR GHRDC Outstanding Engineering Colleges Excellence
- 1. Ranked 11th Position at All India level in 2018-2019
- 2. Ranked 9th Position at All India level in 2019-2020
- 3. Ranked 9th Position at All India level in 2020-2021
- 4. Ranked 4th Position at All India level in 2021-2022
- AICTE CII Survey of Industry linked Technical Institutions
- 1. Rated in Silver category by AICTE CII Survey in 2017-2018
- The Week Top Engineering Colleges All India
- 1. Ranked 89th Position in 2017-2018
- 2. Secured 61th Position at Private Engineering College South Zone in 2017-2018
- 3. Ranked 124th Position in 2018-2019
- 4. Secured 84th Position at Private Engineering College level in 2018-2019
- 5. Secured 55th Position at Private Engineering College South Zone in 2018-2019
- 6. Secured 96th Position at Private Engineering College level in 2021-2022
- Times Engineering Colleges Survey
- 1. Secured 21st Position in Top Private Engineering Institutes in 2020-2021
- 2. Secured 139st Position out of Top 175 Engineering Institutes in Overall rankings across India in 2020-2021
- 3. Secured 87st Position out of Top 170 Engineering Institutes in Overall rankings across India in 2021-2022

Page 121/130

- Atal Ranking of Institutes on Innovation Achievements (ARIIA)
- 1. Categorised as Band Promising Colleges/Institutes (Private/Self-Financed) (Technical) by Ministry of Education in 2020-2021

Concluding Remarks:

The management of KSRCE is keen in developing the institutions to a greater height through state of art infrastructure, experienced faculty and skilled staff. The institution enjoys a healthy and positive relationship between faculty and students. While teachers are firm, they deal with students with kindness and concern.

KSRCE believes in participatory administration and faculty shoulder greater responsibility and demonstrate leadership with dedication. The alumni of the institution reconnect with their alma mater by offering guest lectures, internship and interact with students through knowledge sharing sessions.

The institution has MoUs with industries, established centres of excellence with their support for training and placement. They have adopted the models viz, "Train & Hire" and "Hire & Train" so that the students are ready for deployment.

The management adopts transparent in governance, practices secularism; and provide equal opportunity for everyone in the campus. The women employees and girl students enjoy equal access to resources without bias.

Actions taken on the recommendations of last NAAC accreditation include: The documentation of all relevant academic and administrative process; granting of seed money for research; the quality of Research & publications are monitored by a Research advisory committee; collaboration with industry for consultancy and research.

KSRCE with its well drawn vision and mission, envisioned strategies/perspective plan strives to equip students with academic edge and skills required to explore their chosen field to a more advanced level with a rewarding and unparalled learning experience. KSRCE provides an environment that sets the learners on the right path towards a professionally rewarding career and personally fulfilling future; it's a place to explore new interests and experience a wholesome education.

The self study report is the self introspection of the institution and ascertains a critical analysis of its own strengths, weakness, challenges and the opportunities. There have been a constant and consistent progresses during the last five years after the Ist cycle of NAAC accreditation.

The institution is committed to provide quality education to make the individual become technologically superior, socially conscious, responsible and contribute to the growth of the Nation.

6.ANNEXURE

1.Metrics Level Deviations

35 1 75 0 1 0	
Metric II) Sub (Duestions and Answers before and after DVV Verification
	bucstions and Answers before and after D v v verification

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
640	641	648	635	591

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
545	456	578	588	435

Remark : DVV has not considered those courses which having not focus on employability/entrepreneurship/ skill development.

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

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

Answer before DVV Verification: 1135 Answer after DVV Verification: 1084

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

Answer before DVV Verification: 172 Answer after DVV Verification: 190

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

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
14	14	55	113	111

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
8	9	35	98	87

Remark: DVV has not considered Certificate of Appreciation Best Women Faculty Appreciation ESN Publication Participation Certificate on Advance Course On Performance based Design of Structures Red Hat Certified System Administrator International conference on Sustainable Building materials, The Netherland Best Women Faculty Best Senior Faculty IPR Award Participation Certificate on Advanced finite element method for engineering problems

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
134	114	138	111	131

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18		
89	78	85	95	98		

Remark: DVV has cross verify the ISSN number form UGC Care list/SCOPUS/Web Sciences.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
35	81	48	180	159

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
27	65	39	176	145

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
59	60	76	109	73

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
12	10	13	15	14

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
35	28	30	28	27

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
30	28	28	22	25

Remark: DVV has considered one program once for a year.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
2206	2110	2352	2686	3316

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1870	2110	2227	2266	3141

Remark: DVV has considered one program once for a year.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
525	319	448	352	358

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
525	319	447	195	166

Remark: DVV has counted one collaborating agency once for a year.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1816	1884	2228	2724	3630

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1816	1884	2228	2724	3508

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

- 5.2.1 Average percentage of placement of outgoing students during the last five years
 - 5.2.1.1. Number of outgoing students placed year wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
341	518	582	774	834

Answer After DVV Verification:

2021-22 2020-21 2019-20 2018-19 2017-18	2021-22	2020-21	2019-20	2018-19	2017-18
---	---------	---------	---------	---------	---------

Remark: DVV has not considered trainee letter. DVV has made the changes as per pro-rata basis of shared offer letter by HEI.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
11	20	110	76	45

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1	20	110	76	45

Remark: DVV has not considered award received in inter college level.

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
90	95	125	183	193

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
72	63	99	132	144

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
24	24	25	23	24

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
5	6	6	5	1

- Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).
 - 6.3.4.1. Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
119	122	142	152	161

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
109	119	131	145	158

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
2.29	1.65	1.79	3.14	1.51

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

Remark: Grant received from own college faculty has not considered.

2.Extended Profile Deviations

)	Extended (Questions							
	Number of outgoing / final year students year-wise during last five years								
	Answer before DVV Verification:								
	2021-22	2020-21	2019-20	2018-19	2017-18				
	481	700	565	932	1030				
	401	700	303	932	1030				
	Answer At	Answer After DVV Verification:							
	2021-22	2020-21	2019-20	2018-19	2017-18				
	488	724	810	1065	1127				
	Number	Number of full time too shore was a suring the last firm							
2	Number o	Number of full time teachers year-wise during the last five years							
	Answer before DVV Verification:								
	2021-22	2020-21	2019-20	2018-19	2017-18				
	210	228	217	239	327				
		·	·	·	·				
		fter DVV Ve		2010 10	2017 10				
	2021-22	2020-21	2019-20	2018-19	2017-18				
	204	227	192	225	326				
,	Number o	f seats earn	narked for r	eserved cate	egory as per				
	last five ye			osci vod odo	ogory as per				
		fore DVV V		2010 10	2017 10				
	2021-22	2020-21	2019-20	2018-19	2017-18				
	464	660	625	708	840				
	Answer At	Answer After DVV Verification:							
	2021-22	2020-21	2019-20	2018-19	2017-18				
	465	661	626	709	840				
	1403	001	020	107	040				
5	Total Exp	enditure ex	cluding sala	ry year-wis	e during las				
					_				
		fore DVV V		2010 10	2017 10				
	2021-22	2020-21	2019-20	2018-19	2017-18				
	204.12	215.17	434.27	621.87	812.65				
	Answer At	fter DVV Ve	rification:						
	2021-22	2020-21	2019-20	2018-19	2017-18				
	204.12	215.17	393.59	487.98	531.81				
	204.12	213.17	373.37	407.90	331.61				