Yearly Status Report - 2016-2017

Part A	
Data of the Institution	
1. Name of the Institution	**S. C. M. S. SCHOOL OF ENGINEERING AND TECHNOLOGY**
Name of the head of the Institution	**Prof. M. Madhavan**
Designation	**Principal**
Does the Institution function from own campus	**Yes**
Phone no/Alternate Phone no.	**04842450330**
Mobile no.	**9846012987**
Registered Email	**sset@scmsgroup.org**
Alternate Email	**madhavan@scmsgroup.org**
Address	**SCMS School of Engineering and Technology Vidya Nagar, Palissery, Karukutty, Ernakulam - 683 582 Kerala**
City/Town	**Ernakulam**
State/UT	**Kerala**

Pincode	**683582**

2. Institutional Status

Affiliated / Constituent	**Affiliated**
Type of Institution	**Co-education**
Location	**Rural**
Financial Status	**Self financed**
Name of the IQAC co-ordinator/Director	**Dr. Anitha G Pillai**
Phone no/Alternate Phone no.	**04842450330**
Mobile no.	**9497775295**
Registered Email	**sset@scmsgroup.org**
Alternate Email	**anithagpillai@scmsgroup.org**

3. Website Address

Web-link of the AQAR: (Previous Academic Year)	https://www.scmsgroup.org/sset/NAAC/AQAR_2016_17/AQAR2016_17.pdf

4. Whether Academic Calendar prepared during the year	**Yes**
if yes,whether it is uploaded in the institutional website: Weblink :	https://www.scmsgroup.org/sset/NAAC/AQAR_2016_17/academiccalendar2016_17.pdf

5. Accrediation Details

Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
1	**B+**	**2.67**	**2016**	**05-Nov-2016**	**04-Nov-2021**

6. Date of Establishment of IQAC	**14-Oct-2016**

7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by	Date & Duration	Number of participants/ beneficiaries

IQAC		
ISO Audit	21-Jul-2017 1	10
KTU academic audit	26-May-2017 1	7
KTU academic audit	17-Mar-2017 1	8
KTU academic audit	20-Dec-2016 1	7
KTU academic audit	04-Oct-2016 1	7
IQAC Meeting	22-May-2017 1	13
IQAC Meeting	15-Mar-2017 1	13
IQAC Meeting	13-Feb-2017 1	13
IQAC Meeting	20-Aug-2016 1	14
[View File](#)		

8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
SSET/ECE Department/ Dr. Sunil Jacob	Research project Funcding scheme	Kerala State Council for Science Technology and Environment	2016 365	30000
Institution	IEDC GRANT	KERALA STARTUP MISSION	2017 365	200000
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9. Whether composition of IQAC as per latest NAAC guidelines:	**Yes**
Upload latest notification of formation of IQAC	[View File](#)
10. Number of IQAC meetings held during the year :	**4**
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	**Yes**
Upload the minutes of meeting and action taken report	[View File](#)

11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

12. Significant contributions made by IQAC during the current year(maximum five bullets)

• Streamlining and standardizing for KTU academic audits • NAAC First Cycle Accreditation – peer team visit from 3 – 5 October 2017 • Strengthening the mentoring system. • ISO 90012015 certification • NBA accreditation work initiated

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13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Plan of Action	Achivements/Outcomes
Soft skill development and personality development programmes for students	Tie up established with ICT Academy of Kerala and Konfidence to work in tandem with the placement and training cell to equip students for a better future and help students perform well in corporate aptitude tests and systematic training programmes undertaken.
NAAC accreditation	SSR was updated including details for AY 201516. Peer team visit took place during 3 to 5 October 2016 and the institution was accredited with B grade for 5 years from 05.11.2016 to 04.11.2021.
KTU inspection and external audits	Activities were streamlined as per guidelines issued by University
Enhance activities innovation and research	A handbook of research released to provide guidelines to promote scientifically, socially and ethically relevant research work. Fablab was established and started functioning fullfledged and innovative projects were undertaken. SSET Knowledge Sharing programme was initiated for the benefit of faculty and also to promote collaborative as well as interdisciplinary research at SSET. 4 inhouse sessions were undertaken during the period. Advances in Technology, Engineering and Computing A Multinational Colloquium (ATECMC17) in collaboration with internationally reputed Vrije University Brussels, Belgium and RavensburgWeingarten University, Germany was held on 22nd 23rd June 2017 with a funding from KSCSTE.

14. Whether AQAR was placed before statutory body ?	**Yes**

Name of Statutory Body	Meeting Date
SCMS Board of Management	**29-Dec-2017**

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	**Yes**
Date of Visit	**04-Oct-2016**

16. Whether institutional data submitted to AISHE:	**Yes**
Year of Submission	**2016**
Date of Submission	**04-Oct-2016**

17. Does the Institution have Management Information System ?	**Yes**
If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	**Ecoleaide academic management System is the Management Information System of the Institution. Teaching Learning module, Library module, HR module and Admissions module are operational. Ecoleaide is used as a medium of communication between management, faculty and students.**

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

For effective implementation of the curriculum SSET meticulously formulates and develops action plans. The Institution is affiliated to University and the curriculum for all the courses is given by the University, by Mahatma Gandhi University (for admissions prior to 2015) and by A P J Abdul Kalam Technological University for (admissions from 2015 onwards). The institution diligently follows the academic calendar prescribed by the university and prudently delivers on time, the curriculum prescribed by the university. With the university calendar as framework the college prepares academic schedule for each semester incorporating details of internal assessments in addition to a calendar for the entire year incorporating various activities of the college and that of individual departments. Within each department, subjects are

allotted to faculty based on their specialization, preferences and experience in handling the subject by the Heads of the Departments, which is then submitted to the Principal for final scrutiny. Faculty prepares detailed course plans indicating topics to be covered in various sessions, text books, reference books to be referred for various topics and evaluation criteria. Faculty also prepares detailed notes for the allotted subject well in advance to ensure effective delivery of curriculum. Class wise time table and faculty time table are prepared before the commencement of the semester and are made available to faculty and students. Principal holds meeting with the entire faculty before the start of the semester as well as with the individual departments during the course of the semester for closer review of academic activities. Two class coordinators are assigned to each class before the start of the semester. These coordinators, with the help of other faculty handling subject in the same class keep a close watch on the student attendance, academic performance and progress as well as their discipline. Regular meetings are also conducted at department level for monitoring the academic activities as well as to ensure proper discipline within the campus. Subject log books and course files maintained by the faculty are reviewed by the respective HOD?s and the Principal. Unexpected holidays are compensated by working on available Saturdays. Class committees formulated with representation from students holds meetings twice in a semester and reviews conduct of classes, effectiveness of delivery and in addition provides a forum for the students to discuss issues related to academic matters or other grievances if any and suitable remedial measures are taken. After internal assessments in the form of series examinations and on publication of the university results, parents are intimated about their wards performance by means of progress cards, phone calls etc. and open house meetings where one to one interaction is made possible. Remedial classes are arranged for the academically weaker students to improve upon their performance.

1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entrepreneurship	Skill Development
Robotics and Embedded Systems	0	30/09/2016	3	Employment	Technology
Bhavishya	0	08/03/2017	4	Employment	Technology

1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
PhD or DPhil	Computer Science & Engineering	28/12/2016
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1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BTech	Automobile Engineering	01/08/2016
BTech	Civil Engineering	01/08/2016
BTech	Computer Science & Engineering	01/08/2016

BTech	Electronics & Communication Engineering	01/08/2016
BTech	Electrical & Electronics Engineering	01/08/2016
BTech	Mechanical Engineering	01/08/2016

1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	546	Nil

1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
RUBY Training program	10/04/2017	55
Training on How to write a Journal paper	23/01/2017	120
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1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BTech	Automobile Engineering	30
BTech	Civil Engineering	75
BTech	Computer Science & Engineering	89
BTech	Electronics & Communication Engineering	123
BTech	Electrical & Electronics Engineering	22
BTech	Mechanical Engineering	12
[View File](#)		

1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained

1. Feedback from students: Representative feedback from the students is obtained twice in a semester by way of class committee meetings. Class Committee members includes class coordinators, subject teachers and Head of the Department. Such meetings give an opportunity to the faculty members to understand the needs of the students and initiate corrective steps in teaching

learning processes. Formal student feedback is taken towards the end of the semester regarding the teaching learning process. Online feedback system has been designed for the purpose 2. Feedback from the parents: At specified times during an academic year, usually after the series exams or after announcement of university results, parents are called in and met by the Principal and faculty on a one-to-one basis. During these occasions parents get feedback about their ward's progress and the institution gets an opportunity to collect feedback from the parents. Open-house meetings are organized for parents of undergraduate students during which, parents are apprised of their ward's academic performance and various activities of the institution. These meetings have provided an opportunity for the institution to gather feedback from the parents about the curriculum. 3. Feedback from industry experts/recruiting firms: Feedback is obtained from firms where students undergo industrial training, internships etc. and also from the firms/industries who had hired our students. 4. Feedback from alumni: Alumni reunions are held in the campus. Alumni are also invited to the campus to interact with the students and faculty. In all such occasions feedback from alumni is collected and are considered for enriching the curriculum aspects. An alumni portal also exists for this purpose.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BTech	Civil Engineering (PFA rest of the details)	120	175	114
BTech	Automobile Engineering	60	78	43
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2.2 – Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2016	2342	236	175	Nill	25

2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
175	175	7	48	Nill	5
View File of ICT Tools and resources					
View File of E-resources and techniques used					

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

Effective mentoring is provided by the concerted efforts of a group comprising of Class Coordinators and subject teachers of each class who provide support and guidance for student problems related to academics as well as personal issues. The Class Coordinator is in constant touch with the parent/guardian. Students' progress reports are prepared by the class coordinators from first to final semesters and made available to parents. Thus Parents/ guardians are kept informed about the performance of the students. Mentoring sessions conducted by faculty thus forms an effective tool for monitoring the student performance. Once the faculty identifies the students with difficulties, special attention is given to such students, in class activities. Open house meetings are conducted periodically for one to one interaction between parents of all students and teachers in the presence of students. • Continuous evaluation system with such performance reports made available to the students and parents provides an opportunity to enhance the academic performance of the students. • Support sessions are arranged for weak students within class hours or after regular class hours. In addition whenever required, parents are invited for counseling along with the students. The institution also recommends expert counseling advice to those students who need it as suggested by the faculty mentors.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
2578	175	1:15

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
Nill	Nill	Nill	5	Nill

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2017	Dr. Vinod P	Professor	Post-Doctoral Fellowship, Malaviya National Institute of Technology, Jaipur
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2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
Mtech	M. Tech (Please find details in list attached)	S2	02/06/2016	28/06/2016
BTech	B. Tech	S2	02/06/2016	24/06/2016
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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

Being an affiliated institute, there is little scope for the college to introduce its own evaluation system. At the same time certain measures taken for improving student performance are: - Class tests and unit tests are conducted in addition to series tests to better prepare the students - Tests conducted are scrutinized and returned to the students within a stipulated time and the parents are also kept informed - To improve the performance of the students, remedial classes are arranged for the weaker students - Student centric learning through additional assignments, seminar presentations - Inducing students to attend the classes regularly even though minimum stipulated attendance prescribed by the University is 75 - Student information is maintained in ECOLEAIDE- a web application to track student information, attendance, and internal evaluation as well as to get a detailed performance analysis of students.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

The affiliating University provides an academic calendar every year including details such as semester start and end dates and date within which internal tests are to be completed, dates for theory/practical end semester examination. The Institution based on this prepares an academic schedule indicating dates of series examinations. Examination cell with representatives from all departments is responsible for effective conduct of internal tests. Answer scripts are valued in a time bound manner and returned to the students. Progress reports are sent to parents. Examination Cell with a senior professor as convener and acting as the Chief Superintendent of Examinations assisted by Senior Assistant Superintendent and a group of faculty members is responsible for conduct of end semester examinations, as per guidelines published by University in the Examination Handbook.

2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

https://www.scmsgroup.org/sset/NAAC/AQAR_2016_17/PEOPOPSOCO.pdf

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
B. Tech	BTech	Civil Engineering	109	68	62.39
B. Tech	BTech	Computer Sc. & Engg.(Please find details in attached list)	59	52	88.14
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2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

https://www.scmsgroup.org/sset/NAAC/AQAR_2016_17/studentssatisfactionsurvey2016_17.pdf

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Resource Mobilization for Research

3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Minor Projects	60	Thiruvalla Medical Mission Nursing College	0.25	0.25
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3.2 – Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Environmental sustainbility and green IT by TCS	Civil Engineering	27/06/2016
Green Buildings – Concept and Practice Griha and LEED Certification for Green Buildings	Civil Engineering	27/06/2016
Innovative Technologies in Energy Efficiency and the role of Energy Audits	Electrical Mechanical Engineering	27/06/2016
Multispecies Freshwater Biomonitoring Dr. George Thomas, Limco GmbH, Konstanz, Germany	Civil Engineering	20/07/2016
Hands on Seminar/Workshop on Practical Electronics by Mr.Andrew Dominic, Truetek Technologies	Electronics Communication Engineering	01/07/2016
Real time grid management and power system stability by Er. Amrita Sasi, Assistant Enineer, SLDC, KSEB Kalamassery	Electrical Electronics Engineering	28/03/2017

3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
10th position for Go Kart No 135	18 member student team led by Telbin Thomas and Ramkumar K, Faculty Advisor - Koshy P Joseph	ISNEE - 4th Go Kart Design Challenge (GKDC)	17/01/2017	Innovative Project
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3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
Nil	NA	NA	NA	NA	31/05/2016

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3.3 – Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
0	0	0

3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
Nil	Nill

3.3.3 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
International	Civil Engineering	8	4.99
International	Computer Science Engineering	9	2.4
International	Electrical Electronics Engineering	1	1.27
International	Electronics Communication Engineering	3	0.88
International	Mechanical Engineering	5	5.4
International	Basic Science Humanities	2	6.18

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3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Computer Science Engineering	1
Mechanical Engineering	2
Electrical Electronics Engineering	1
Civil Engineering	7

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3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Microbial	Sanju Sreedharan,	Civil Engineering	2016	1	Research Scholar,	1

| Fuel Cell (MFC) Technology for Household Waste Reduction and Bio-Energy Production | RenuPawels | and Urban Planning: An International Journal (CiVEJ) | | | School of Engineering, CUSAT | |
| Damage Modelling of Reinforced Concrete Beam | Neema Nazar P.A, Airin M.G | International journal of Science and Research | 2016 | 2 | SCMS School of Engineering and Technology | Nill |

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3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Solving Maximal Flow Problem Using Fuzzy Octogonal Number	Dr Sreelekha B	International Journal of Engineering Research and Applications	2016	24	Nill	0

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3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	4	8	2	8
Presented papers	11	3	Nill	Nill
Resource persons	Nill	2	Nill	3

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3.4 – Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
LET'S GO TO GREEN	National Service Scheme	2	100
FLOWERS DAY OBSERVANCE	National Service Scheme	2	100

PLANTING SAMPLING	National Service Scheme	2	100
KTU BOOK BANK	National Service Scheme	2	50
SETTING UP LIBRARY AT GOVERNMENT SCHOOL, PALISERY	National Service Scheme	2	20

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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
TP Canal mapping	Special appreciation	Kochi Municipal Corporation	20

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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
VITTIYA SAKSHARATHA ABHIYAN	National Service Scheme - Technical Cell	VITTIYA SAKSHARATHA ABHIYAN	2	100

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3.5 – Collaborations

3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
International Student Internship	Mr. Sajith Paul Thomas, Semester 7, CSE Department Mr. Dipin Dinesh, Semester 7, CSE Department	Matsue City Japan	12

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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Student Internship, Training and	SCMS-Matsue City IT	Matsue City and Shimane	07/01/2016	07/01/2017	Mr. Sajith Paul Thomas, Semester 7,

Recruitment	Internship Program	University, Japan, Contact: Ms. Aarti Daas Email: aarti daas.960306@ yahoo.com			CSE Department • Mr Dipin Dinesh, Semester 7, CSE Department
MoU	Campus Connect Program	Infosys Limited, Mr. Hari S, Lead-Education and Training Infosys Trivandrum Center, Contact: Hari_S@infosys.com	16/01/2017	27/01/2017	0

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3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
ICTAK	07/08/2016	Free assessment tests, and SDPusing Paatshala for students	506
Wilmington University	Nill	Exchange of faculty.	89
Carborundum	05/04/2017	Supvervisory Development Certificate Programme	14

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CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
24450000	25590074

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Seminar halls with ICT facilities	Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Existing

Laboratories	Newly Added
Class rooms	Newly Added

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4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
Ecoleaide	Fully	3.3.0	2015

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	36098	8237478	660	111415	36758	8348893
Journals	142	369150	Nill	Nill	142	369150
e-Journals	233	1190700	3000	68700	3233	1259400
Digital Database	3	Nill	1	Nill	4	Nill
CD & Video	1769	Nill	10	Nill	1779	Nill

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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Nil	Nil	Nil	01/07/2017

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4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/ GBPS)	Others
Existing	777	10	10	1	2	10	9	10	41
Added	0	0	100	0	0	0	0	100	0
Total	777	10	110	1	2	10	9	110	41

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

110 MBPS/ GBPS

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility

0	0

4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites
42875000	40779953	82023000	90854070

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

As per the ISO Quality System Manual, the resource requirements like faculty, library books, computers and laboratory equipments are planned and resourced as per AICTE/KTU norms. Class rooms and labs are allotted for each course and subject as per the time-table. The institution has adequate number of classrooms, seminar halls, well equipped laboratories, computer labs, research space, facility for indoor and outdoor games, gymnasium, open air auditorium, language lab, hostel facility for boys and girls with recreation facility, canteen, playground and parking facility. New enhancements are made to existing infrastructure whenever needed by the management. The institution has a very spacious central library, long hours of functioning, sufficient number of books, journals, magazines and e-resources. Computer labs are provided with sufficient number of latest machines which are networked and provided with internet facility. The lab and computer facilities are constantly innovated and upgraded and state-of-the-art equipments and machines are regularly added to provide cutting edge instructional facilities. Special care is given to the upkeep of sensitive equipments, lab equipments, LCD projectors, etc. Annual maintenance and timely servicing of equipments and infrastructure ensure their upkeep. https://www.scmsgroup.org/sset/ppt_learning_center https://www.scmsgroup.org/sset/automobile-engineering https://www.scmsgroup.org/sset/civil-engineering https://www.scmsgroup.org/sset/computer-science-engineering https://www.scmsgroup.org/sset/electrical-electronics-engineering https://www.scmsgroup.org/sset/electronics-communication-engineering https://www.scmsgroup.org/sset/mechanical-engineering

https://www.scmsgroup.org/sset/ppt_learning_center

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Merit based scholarships	663	20942500
Financial Support from Other Sources			
a) National	State Central Govt. schemes	365	15941045
b)International	Nil	Nill	0
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5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial

coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
FP5.0 Interaction Session	09/02/2017	55	Infosys Limited
Enable Pre Placement Program	26/07/2016	597	ICT Academy of Kerala
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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2016	Aptitude Training Program by Konfidence Group	606	606	Nill	328
		View File			

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
2	1	7

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed
SUTHERLAND GLOBAL SERVICES (PFA list attached))	165	95	LT TECHNOLOGY SERVICES	61	5
		View File			

5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
Nill	16	B. Tech	Civil Engineering (PFA remaining	Details attached	Details Attached

2017	1	B. Tech	Automobile Engineering	TEESSIDE UNIVERSITY, UK	MSC MECHANICAL ENGG

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5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
Any Other	Nill

No file uploaded.

5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Inter Collegiate Volleyball Tournament	State Level	256
Football Tournament	Inter Class	192
Badminton Tournament	Singles Doubles(Intramural)	150
Cricket Tournament	Inter Class	256
Poetry writing – Malayalam	M.G University union youth festival.	96

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5.3 – Student Participation and Activities

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

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2016	Intercollegiate/University/State	National	Nill	Nill	NA	NA

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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

The Students' Council takes role in organizing co-curricular and extracurricular activities with the help of the faculty. This Council is a non political forum. Class representatives are selected from each class by election and they select the administrative committee members by election among them. The two elected University Union Councillors represents the students? union in the M. G. University Union Council. The various posts held by students in the students? union are: Chairman, Vice Chairperson, General Secretary, Fine Arts Secretary, Magazine Editor and two University Union Councillors. There are student representatives in the following academic/ administrative bodies of the institution. • Students' Council • Class Committees and Course Committees • ICI Students' Chapter • CSI Students' Chapter • Department Associations • Alumni Association • IQAC • Hostel committee • Mess committee Some of the programmes are: 1. 27-08-2016: Union Inauguration 2. 9-09-2016: Onam celebration 3.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

No

5.4.2 – No. of enrolled Alumni:

665

5.4.3 – Alumni contribution during the year (in Rupees) :

0

5.4.4 – Meetings/activities organized by Alumni Association :

Fourth Ambit, an exclusive online portal helps the institute to keep constant connect with its alumni. The Fourth Ambit database updates complete details of the alumni including their present position. All the events in the campus, student and faculty achievements, information regarding alumni meet etc are posted in this portal. The official fourth ambit link of the institution is https://sset.fourthambit.com. Periodical alumni meetings are held. Alumni Association of SSET, ASSET Pookkalam 2016 was held on 2nd September 2016 at Sharjah UAE. In addition to alumni also delivers guest lectures is part of IQAC and facilitates for placement activities.

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

The Management encourages and supports the involvement of the staff in improving the effectiveness and efficiency of the institutional process. The management through the Head of the Institution ensures and encourages active participation of the entire faculty in overall development of the students and the college. Various committees for ensuring academic ambience and discipline in the campus is comprised of and headed by faculty members. Individual faculty is empowered through decentralized functioning mechanism. Formal/Informal gatherings with the management is held where faculty are free to give their suggestions and opinions.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Admission of Students	The admission process at SSET is a time-bound activity. After every step of the selection process, a brief review is done to check the number of candidates who moved ahead to the next stage of the process from the stage of application. The applications of the

	finally admitted candidates along with copies of all relevant documents are filed for future reference. The admission committee including The Director, The Principal and members from the management faculty reviews the process of admission in all respects at all its stages. The management is entitled to admit students only to 50 management seats and the rest of the seats are filled as per the norms and rules laid down by the Govt. of Kerala and the affiliating university. Institution ensures that the entire admission process is made transparent and strictly abides by the rules and regulations.
Industry Interaction / Collaboration	Industry Institute Interaction cell (IIIC) organises guest lectures, industrial visits for the benefit of the students and faculty. Experts from industry are invited to the institution to interact with students on emerging engineering practices. IIIC also provides students with internship opportunities and is responsible for bringing in industrial linkages, promoting consultancy activities and signing of MoUs with industries.
Library, ICT and Physical Infrastructure / Instrumentation	SSET has adequate number of classrooms, tutorial rooms, seminar halls, well equipped laboratories in all departments, computer labs, seminar halls auditorium. Pradeep P Thevannoor learning resource centre - total area of 2310 m2 and a seating capacity of 300. Modern Gymnasium – 123m2 area Auditorium – 1550m2 and seating capacity of 2500 Open air amphitheatre – 705m2 area Canteen – 1300m2 area Fleet of 23 college buses
Research and Development	SCMS School of Engineering and Technology believes that its educational programmes can flourish and teaching learning process become meaningful only when sustained by continuous, active participation of its faculty and students in research, augmented by interactions with industry, other institutions, research organisations and the society. Hence necessary steps have been taken for ensuring research. SCMS Water Institute was formed in 2010 in order to address the water related environmental problems affecting the society. Since water is one of the most important

	resource limitations of the century, it was the commitment from the SCMS Group of Educational Institutions to establish a research and consultancy centre on water for its effective management and sustainable development. The institute was initially named as Centre for Sustainable Water Technology Management (CSWTM) which got renamed to SCMS Water Institute (SWI) in 2014. SCMS Water Institute addresses the water related issues through multidisciplinary efforts in order to achieve a sustainable and secure water future. SCMS Water Institute accomplishes its mission through research and development, technology incubation and application, education and training, demand driven consultancy and networking.
Examination and Evaluation	Examination Monitoring Cell with a senior professor as convener and acting as the Chief Superintendent of Examinations assisted by Senior Assistant Superintendent and a group of faculty members is responsible for conduct of university examinations. The cell also officiates as the examination squad to keep a vigil on all Semester-End examinations. In addition, the cell is also entitled to receive any grievances from students regarding issues like out-of-syllabus questions, printing mistakes, etc. of end semester examinations of theory and practical subjects. The cell investigates such complaints and if necessary, forwards it to university with specific comments.
Teaching and Learning	Bridge courses are held just before the academic session begins so as to equip the new entrants with all those basics required for study of the B.cTech programme. Remedial classes are arranged during the academic semesters for the weak and slow learners after normal class hours and/or on weekends as per the convenience of students. Additional support is extended to bright students for further improving upon the academic grades.
Curriculum Development	The institute is affiliated to Mahatma Gandhi University, Kottayam and A P J Abdul Kalam Technological University, Thiruvanathapuram. The curriculum is as prescribed by the university. Each department has a

	Department Advisory Committee, which examines the gaps in the syllabus, and provides recommendations for bridging the same.
Human Resource Management	The institution has well defined HR policies incorporating progressive and transparent approach systems and procedures for recruitment, training, career progression and employee benefits.

6.2.2 – Implementation of e-governance in areas of operations:

E-governace area	Details
Planning and Development	E-governance not yet executed fully, provision to access e- journals enabled.
Administration	Ecoleaide ERP software - partially paper free - Login provided to parents and students for monitoring student attendance and performance.
Finance and Accounts	Computerized office and accounts section Finance module in ERP Ecoleaide.
Student Admission and Support	Admission module in ERP Ecoleaide - partial automation
Examination	CIEs using exam module in ERP Ecoleaide and ESE using university (KTU) e governance platform

6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2016	Dr. Vidya Chandran	ACEM 2016, Jeju, South Korea	NA	30000
2017	Koshy P Joseph, Sujay K, Haridas V K	4th Go Kart Design Challenge	Indian Society for New Era Engineers (ISNEE)	15000
2017	Koshy P Joseph (AU) Sreeshyam Divakaran (EEE)	5 Day Proficiency Development Program (PIP) on Hybrid drives, Traction and Controls	Automotive Research Association of India (ARAI)	54690
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Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2016	Nil	Industrial Safety Awareness	26/08/2016	26/08/2016	Nill	15
2016	Digital financial literacy Campaign	Nil	17/12/2016	17/12/2016	8	Nill
Nill	Technological Innovations to Solve Water Crisis	Nil	12/05/2017	12/05/2017	5	Nill
2016	Workshop on publishing Quality Research Articles with LaTex	Nil	26/08/2017	27/08/2017	15	Nill
2017	Advances in Technology, Engineering and Computing - A Multinational Colloquium International Conference on Characterization of Composites in Engineering	Nil	22/06/2017	23/06/2017	33	Nill
2017	Workshop on ISO certification and Auditing	Workshop on ISO certification and Auditing	16/03/2017	17/03/2017	13	4
2017	Insights into research	Nil	06/01/2017	06/01/2017	98	Nill

6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

2016	Training on Water Pipe Leak Detection and Pipe Tracing	Training on Water Pipe Leak Detection and Pipe Tracing	26/09/2016	26/09/2016		2	2
2016	Metaheuristic Algorithms for Optimization	Nil	03/12/2016	03/12/2016		42	Nill
2017	Insights in research	Nil	06/01/2017	06/01/2017		55	Nill

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6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
FDP-Concepts Coaching (PFA details)	1	02/11/2016	04/11/2016	2
PROFICIENCY IMPROVEMENT PROGRAM (PIP) on Hybrid drives, Traction and Controls	1	03/04/2017	07/04/2017	5
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6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
5	5	8	8

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
Ph.D Leave with pay, Course work leave, Travelling allowance, Employees Provident Fund, reservation in admission for eligible wards of employees and concession/fee waiver for meritorious students.	Employees Provident Fund ESI, 12 earned leave per year and if not availed can be carried forward to next year, reservation in admission eligible wards of employees and concession/fee waiver for meritorious students	Students insurance, Merit Scholarship

6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

The institute has mechanisms for internal and external audit. The institute has an internal auditor who along with the financial committee audits all the accounts periodically. External audit is carried out once in a year. External Auditor verifies all receipts expenses bills, payments of the Financial Year.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
TP Constructions, Karukutty JJ Cement bricks and Tiles, Mekad Kairali Minerals, Nalukettu, Malayala Manorama	43100	Consultancy, Project funding
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6.4.3 – Total corpus fund generated

277858376

6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	KTU, ISO	Yes	Internal academic audit committee
Administrative	Yes	ISO	Yes	ISO

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

Open-house meetings are organized once every semester for parents of undergraduate students during which, parents are apprised of their wards academic performance and various activities of the institution. These meetings have provided an opportunity for the institution to gather feedback from the parents about various activities of the institution. Parents are part of various committees during which constructive feedbacks are provided. They also participated in the accreditation processes, where they contributed by giving feedbacks to the peer team.

6.5.3 – Development programmes for support staff (at least three)

* Staff development program for lab technicians * Industrial Safety Awareness workshop * Training to assist in consultancy works of the institution

6.5.4 – Post Accreditation initiative(s) (mention at least three)

* NBA accreditation work initiated with implementation of OBE * Initiated work for transitioning from ISO-9001:2008 to ISO-9001:2015 * Improve in areas of consultancy and research innovation * Establishment of Fablab

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes

c)ISO certification	Yes
d)NBA or any other quality audit	Yes

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2017	Training on ISO 9001-2015	13/02/2017	01/03/2017	03/03/2017	20
2016	Workshop on Outcome Based Education	20/08/2016	26/10/2016	26/10/2016	135
2016	Aspects and significance of NBA accre ditation	20/08/2016	11/10/2016	11/10/2016	92
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CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Womens day Clebrations	08/03/2017	08/03/2017	58	40
Health and Hygieine	05/10/2016	05/10/2016	53	38

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
An Effluent Treatment Plant (ETP) capable of treating about 1 lakh litre of waste water is operational. Treated waste water is effectively used for irrigation inside the campus. A portion of the treated water undergoes further treatment using reverse osmosis and UV. Rain water harvesting is done and routed to the open well in the campus.

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Provision for lift	Yes	Nill
Ramp/Rails	Yes	Nill
Scribes for examination	No	Nill
Special skill development for differently abled students	No	Nill

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2017	Nill	1	08/01/2017	270	Estimation of Non-Revenue water in Meloor Panchayath	Estimation of Non-Revenue water in Meloor Panchayath	4

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7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
A Handbook of Research	10/08/2016	Hand book of research is an initial step to provide guidelines for the researchers to adhere to a procedure, hierarchy and governance so that there is absolutely no ambiguity as far as research activities are concerned. It states a policy, its purpose and application in the outset and then describes the rights, duties and responsibilities of individuals and groups. The hierarchical arrangement of various groups and committees has also been presented. The purpose of the policy is to establish a framework within the limits of which the entire research activities of the Institution shall be executed. The objective of the policy is to provide guidelines to promote scientifically, socially and ethically relevant research work.
Manual of policies	01/08/2016	This is a comprehensive document that is aimed at providing students of SCMS School of Engineering and

		Technology (SSET), a very clear picture of the framework within which the institution functions. This document also provides a clear idea about the rules and regulations applicable to the students, procedures to be followed, rules of conduct of students and details of academic activities.
Service Rules	01/01/2016	All the procedures and rules relating to the staff have been compiled into a book, titled "Service Rules" for the benefit of the employees. The Service Rules are revisited every year to make necessary amendments or delete outdated content. Any new policy formulated by the Management is also included.

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Sparsham16	10/09/2016	10/09/2016	47
Prithvi	06/10/2016	06/10/2016	31
Jeevani16	16/11/2016	16/11/2016	3
Pranava 17	04/03/2017	04/03/2017	110
World water day: Theme - Reduce, Reuse, recycle	22/03/2017	22/03/2017	46

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7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

? Planting trees NSS unit takes up tree planting campaign every year. The College organizes tree plantation to inculcate this culture among the students. ? e-waste management Old computers and other wastes generated from the electronic equipments are sold to authorized scrap dealers. The old computers in working condition are also donated to nearby schools. ? Efforts for Carbon neutrality Efforts are taken to reduce carbon emission by • Institute provides enough transportation facilities to students and staff alike thereby use of individual vehicles is minimized. Pooling of cars is practiced by staff and students. College buses are regularly checked for pollution control. Open burning of any waste products is not allowed in the campus.

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

1. Title of the Practice: Industry - Academia Linkages Goal: • To create

avenues for close academia and industry interaction and foster a culture that strongly promotes research and innovation • To leverage academic research to strengthen industry linkages • To initiate collaborations with industry to pursue research applicable to real world situations. • To collaborate with Institutions of higher learning. The Practice: In addition to the conventional methods of developing corporate interface such as the public relations work, organizing guest lectures and seminars, industrial visits, etc, leading to the placement of students, the institute strongly believes in establishing a firm foundation for corporate interface through innovative practices. Some of these practices include joint research projects taken up with industry, field studies undertaken by our faculty and students, involvement of students in associating themselves with the industry on some live projects and consultancy projects taken up by our faculty. 2. Title of the Practice: Technology Transfer for Societal Improvement Goal: • To inspire the faculty and students to implement the technological knowledge created at the institute to improve the life and environment of the society. • To create opportunities for the students and staff to interact with the members of society and learn how the technology as they understand can intervene to solve a societal challenge. The Practice: Though 3000 mm rain is received annually by Kerala, most of the communities are facing acute shortage of drinking quality water due to watershed modification, improper sanitation, overuse and misuse. Kerala has highest well density in the world. However, wells get dried up soon in the summer leaving the members of communities to struggle for meeting their basic needs. SCMS School of Engineering and Technology and SCMS Water Institute have been working closely with the Panchayaths and cities near the institute to address this issue. Several initiatives have been taken in this direction and includes: • Point Recharging of wells as climate change adaptation strategy: SSET has been collaborating with the Koratty Panchayat with an emphasis on water quantity and quality in the area. For increasing the quantity of water, a novel approach of roof top rain water recharging in to open wells was developed as a climate change adaptation strategy. SSET is monitoring how effectively the aquifer in the area, which is under the threat of drying up because of the ever increasing temperature in Kerala in between December to May, could be replenished through the point well recharge in the span of a next few years. Now, more than 400 households have come forward for installing roof top rain water harvesting structures for point recharging of their own wells by taking advice from the work of SSET in the Panchayath. SSET gave both theoretical and hands-on training on point recharging of wells to 30 participants of Koratty Panchayath. • Development of Water Quality GIS for Koratty Panchayat in Thrissur District: SSET students in association with Koratty Panchayath has collected water from 190 drinking water sources like domestic and public wells and analyzed for various water quality parameters as per Bureau of Indian Standards. All the water sources were later documented using geographic Information system (GIS) to prepare a water quality atlas. It was found from the results of analysis that 90 of the drinking water sources were contaminated by Coliform bacteria. Another significant observation was the presence of high acidity, Iron and Fluoride in certain wells. Remedial measures were advised and the Panchayath has adopted necessary measures promptly. This water quality atlas will be extremely useful for the water related planning process in view of decentralized planning process of Koratty Panchayath. The atlas is prepared such that it can be updated every six months. • Water Audit at City Scale for Kochi Corporation: Water audit helps in the estimation of overuse and misuse of water. SSET faculty and students conducted water audit at the city scale to allow Corporation to understand the potential sources, the ward wise and sector wise demand for water and the spatial variation of scarcity in the corporation area. SSET analyzed the secondary and primary data collected in this study to develop the water balance for the city and using GIS platform mapped the water stress in the area for the present conditions and for various scenarios in

future. Students of SSET worked along with the women self-help groups to collect the primary data from the city.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link
https://www.scmsgroup.org/sset/NAAC/AQAR_2016_17/bestpractices_2016_17.pdf

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

• Excellent academic ambience in the campus. • State-of-the-art infrastructural facilities. • Dynamic leadership with a clear vision and mission. • Dedicated and highly motivated team of faculty. • Team of faculty is a fine blend of experience and dynamic youth. • Excellent academic track record of students in university examinations. • Students have consistently secured University ranks in Electronics and Communication Engineering, Mechanical Engineering, Civil Engineering, Automobile Engineering and Computer Science and Engineering ever since the first batch passing out in 2005. • A highly disciplined environment for academic pursuit. • In-house faculty development programmes conducted regularly for benefit of faculty. • Excellent track record in placement since 2005. • Open House - Interaction of faculty, parents and students arranged each semester to assess the learning difficulties of individual students, if any, and to chalk out remedial programmes to improve their performance. • Value-added courses offered for benefit of students. • MOU with major IT Industries. • Social commitment reflected in the scholarships and tuition fee waiver schemes for academically brilliant but economically backward students. • ISO Certification for quality teaching of engineering and technology subjects from RINA, Italy. • Innovation and Entrepreneurship Development Centre (IEDC) is formed in the college for promoting entrepreneurship among the engineering students with the guidance of T-TBI Technopark, Thiruvananthapuram. • SCMS Water Institute is set up in the College as a Centre of Excellence to solve water problems as an Indian-German Project with the co-operation and technology support from the University of Applied Sciences, Weingarten, Germany. SWI is the first international research project undertaken by the SSET Centre for Research, Consultancy and Innovation in Engineering and Technology, the research division of the Engineering College. • Innovative management tool Strategic Planning Process is practiced for the development of the institution. • M/s Infosys, after evaluating the performance of Campus Connect activities in the college, selected our college as Advanced Partner, a covetable status among other colleges conducting this program. • Community services like computer literacy for residents of nearby villages by National Service Scheme of SSET. • Consultancy services for Government organizations. • Industry tie-up with M/s. Wipro Mission 10X, Texas Instruments, Infosys Campus Connect, UST Global, Harita Techserv project under TVS Group, Eduvance. • Student exchange programme with University of Applied Sciences, Weingarten, Germany.

Provide the weblink of the institution
https://www.scmsgroup.org/sset/

8.Future Plans of Actions for Next Academic Year

• To obtain funds for our green initiatives from government agencies. • To strengthen ICT facilities in the college. • To augment the infrastructure facilities. • Undertaking R and D projects and consultancy works. • To enhance industry institute interaction programmes. • Setting up of Robotics lab under the e-Yantra Lab Setup Initiative (eLSI) • Formation of NPTEL Local Chapter