



YEARLY STATUS REPORT - 2020-2021

Part A	
Data of the Institution	
1.Name of the Institution	SAHRDAYA COLLEGE OF ENGINEERING AND TECHNOLOGY
• Name of the Head of the institution	NIXON KURUVILA
• Designation	Principal
• Does the institution function from its own campus?	Yes
• Phone no./Alternate phone no.	04802726630
• Mobile no	9446229344
• Registered e-mail	principal@sahrdaya.ac.in
• Alternate e-mail	iqac@sahrdaya.ac.in
• Address	Kodakara, P.B.No.17, Thrissur (Dt), Pin 680684, Kerala State, India
• City/Town	Thrissur
• State/UT	Kerala
• Pin Code	680684
2.Institutional status	
• Affiliated /Constituent	Affiliated
• Type of Institution	Co-education
• Location	Rural

• Financial Status	Self-financing				
• Name of the Affiliating University	APJ Abdul Kalam Technological University				
• Name of the IQAC Coordinator	Dr R Sunder				
• Phone No.	+919943142754				
• Alternate phone No.	9488883786				
• Mobile	9488883786				
• IQAC e-mail address	iqac@sahrdaya.ac.in				
• Alternate Email address	sunder@sahrdaya.ac.in				
3.Website address (Web link of the AQAR (Previous Academic Year)	https://www.sahrdaya.ac.in/iqac/aqar/				
4.Whether Academic Calendar prepared during the year?	Yes				
• if yes, whether it is uploaded in the Institutional website Web link:	https://sahrdaya.ac.in/college-calendar/				
5.Accreditation Details					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 2	B++	2.91	2021	15/03/2021	15/03/2026
6.Date of Establishment of IQAC			05/03/2015		
7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,					

Institutional/Department /Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Dr.Gnana King	STTP - Outcome Based Education with Assessment and Evaluation	AICTE	2020	305667
Dr.Vishnu Rajan	Consultancy - Photofinish-for finding prize winners with timings for track events	Masters Athletic Association of Kerala	2020	25000
Dr.Vishnu Rajan	Consultancy - Ventometer - for finding wind assistance based score addition /subtraction for long jump	Masters Athletic Association of Kerala	2020	25000
Saran K B	Consultancy - Contactless long jump distance measurement	Masters Athletic Association of Kerala	2020	25000
Dr.Gnana King	FDP - Outcome Based Education With Assessment and Evaluation	APJAKTU	2021	200000

Dr. Dhanya Gangadharan & Dr. Jeethu Raveendran	KTU sponsored FDP on Biosensors in Point-of-care diagnostics :Strategies and Implementation	APJAKTU	2021	150000
Dr. Vijikala V & Mr Shimin V V	RECENT TRENDS IN ELECTRIC VEHICLES AND SYSTEM DESIGN	APJAKTU	2021	150000
Dr. R. Satheesh kumar	KTU sponsored FDP on Cyber Security and Cyber Forensics	APJAKTU	2020	200000
Dr. R. Satheesh kumar	National Conference on Sustainable Green Computing and Intelligent Research	AICTE	2020	50000

8. Whether composition of IQAC as per latest NAAC guidelines	Yes		
<ul style="list-style-type: none"> • Upload latest notification of formation of IQAC 	View File		
9.No. of IQAC meetings held during the year	4		
<ul style="list-style-type: none"> • Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website? 	Yes		

<ul style="list-style-type: none"> If No, please upload the minutes of the meeting(s) and Action Taken Report 	No File Uploaded																	
10. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No																	
<ul style="list-style-type: none"> If yes, mention the amount 																		
11. Significant contributions made by IQAC during the current year (maximum five bullets)																		
<p>1. Conducted an Induction programme for the first year UG and PG students to familiarize them with the various activities of the college. 2. Conducted Academic Audit as per the affiliating University's guidelines 3. Every department Strengthened Alumni involvement 4. Student's Feedback and analysis mechanism through a proper format. 5. Monitoring of the assessment process under the OBE framework.</p>																		
12. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year																		
<table border="1"> <thead> <tr> <th data-bbox="76 1115 780 1193">Plan of Action</th> <th data-bbox="780 1115 1489 1193">Achievements/Outcomes</th> </tr> </thead> <tbody> <tr> <td data-bbox="76 1193 780 1305">To implement outcome based education effectively</td> <td data-bbox="780 1193 1489 1305">Outcome based Education is successfully implemented</td> </tr> <tr> <td data-bbox="76 1305 780 1417">Intensive placement training for all the students</td> <td data-bbox="780 1305 1489 1417">Percentage of placements increased</td> </tr> <tr> <td data-bbox="76 1417 780 1529">Learning through Online Platform</td> <td data-bbox="780 1417 1489 1529">Online teaching learning process through LMS platform</td> </tr> <tr> <td data-bbox="76 1529 780 1675">To conduct academic audit for all programs</td> <td data-bbox="780 1529 1489 1675">The external and internal academic audits for all programmes was conducted</td> </tr> <tr> <td data-bbox="76 1675 780 1742">Participation in Ranking</td> <td data-bbox="780 1675 1489 1742">Participated in NIRF and AISHE</td> </tr> <tr> <td data-bbox="76 1742 780 1933">Awareness programme on Entrepreneurship and skill development for students.</td> <td data-bbox="780 1742 1489 1933">Awareness programme on Entrepreneurship and skill development for students was conducted</td> </tr> <tr> <td data-bbox="76 1933 780 2089">Provide ICT and elearning platforms to teachers and students</td> <td data-bbox="780 1933 1489 2089">All class rooms and labs are ICT enabled</td> </tr> </tbody> </table>	Plan of Action	Achievements/Outcomes	To implement outcome based education effectively	Outcome based Education is successfully implemented	Intensive placement training for all the students	Percentage of placements increased	Learning through Online Platform	Online teaching learning process through LMS platform	To conduct academic audit for all programs	The external and internal academic audits for all programmes was conducted	Participation in Ranking	Participated in NIRF and AISHE	Awareness programme on Entrepreneurship and skill development for students.	Awareness programme on Entrepreneurship and skill development for students was conducted	Provide ICT and elearning platforms to teachers and students	All class rooms and labs are ICT enabled		
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Ensure clean and green campus, and to encourage students to carry ecofriendly values to the society.	College strictly follows green protocol.
Maintenance of Incinerators	As female students are forming majority in the college, steps were taken to install new napkin incinerators . Those incinerators under maintenance were also repaired
Upgrading of faculty skillset and technical knowledge through Faculty Development Programmes, Conferences and Industry Training with specific focus.	A number of Faculty Development programmes were conducted with focus on technical as well as teaching skills. APJAKTU sponsored FDP on Outcome Based Education, AICTE sponsored STTP on Outcome Based Education with assessment and its evaluation were conducted in different phases.
NPTEL and mooc course	Good number of students and faculty members registered and passed the NPTEL courses, this helped to improve self learning among the students.
Close interaction with students and parents	Effective mentoring, relations with students and their family
OBE based class room delivery and attainments are tabulated	Gaps identified and appropriate actions were suggested and conducted by the faculty
13. Whether the AQAR was placed before statutory body?	Yes
<ul style="list-style-type: none"> Name of the statutory body 	
Name	Date of meeting(s)
Administrators	09/06/2022
14. Whether institutional data submitted to AISHE	

Year	Date of Submission
2022	28/02/2022
Extended Profile	
1.Programme	
1.1 Number of courses offered by the institution across all programs during the year	423
File Description	Documents
Data Template	View File
2.Student	
2.1 Number of students during the year	1344
File Description	Documents
Institutional Data in Prescribed Format	View File
2.2 Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year	211
File Description	Documents
Data Template	View File
2.3 Number of outgoing/ final year students during the year	376
File Description	Documents
Data Template	View File
3.Academic	
3.1 Number of full time teachers during the year	100

File Description	Documents
Data Template	View File
3.2	96
Number of sanctioned posts during the year	
File Description	Documents
Data Template	View File
4.Institution	
4.1	50
Total number of Classrooms and Seminar halls	
4.2	320.11
Total expenditure excluding salary during the year (INR in lakhs)	
4.3	806
Total number of computers on campus for academic purposes	

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

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

Sahrdaya College of Engineering and Technology is affiliated to APJ Abdul Kalam Technological University, Kerala and follows the university designed curriculum. The university prepares an academic calendar that specifies the duration of the semester, date of commencement and end examination dates. The institution has diverse mechanisms for the effective delivery of the curriculum.

Effective curriculum delivery is ensured through the following procedure:

- **Academic Calendar:** Based on the university academic calendar, the Principal and calendar in charge prepare a detailed academic calendar which includes dates of Continuous Assessment Tests (CAT), assignment submissions,

extracurricular activities, association activities It is then approved in the HOD meetings and thereby published in all notice boards and college website.

- **Department Staff Meeting:** Department wise staff meetings are conducted at least once a month. Decisions in the HOD meeting are conveyed to the faculty members. Action plans are formulated by incorporating the feedback from faculty members.
- **HOD Meeting:** Administrators & HODs meet once in a month and discuss the action plans to arrive at an optimal way of implementation of curriculum delivery.
- **Course Plan:** Before the commencement of each semester a course plan is prepared for every course by the respective faculty and is approved by the HOD and Program Coordinator.
- **Course File:** Faculty members maintain a course file for all courses including laboratory courses which contain :
 - Course Diary containing course plan, subject coverage, academic calendar, students' attendance & result analysis
 - Mapping of Course Outcomes (COs) with Programme Outcomes (POs) & Program Specific Outcomes (PSOs)
 - Tutorial / Assignment Questions and samples.
 - Scheme of Evaluation for Internal Exams
 - Sample Answer Sheets of Internal Exams University Question Papers along with Scheme of Evaluation & Answer Key
- **Course Committee Meeting / Class Committee Meeting:** Periodic Course /Class Committee Meeting with student representatives is conducted for the effective implementation of the course plan. Suggestions from students are also considered.
- **Result Analysis:** Proper evaluation of internal exams & university exams, tutorials & assignments are done by faculty members and are reviewed by the HODs and Principal.
- **Remedial Classes:** Remedial classes are arranged for slow learners who show poor performance in Continuous Assessment

Tests.

- **Progress Report:** Progress reports of each student including attendance, internal exam marks, and university results are made available for parents and students in Linways software.
- **PTWA Meeting:** PTWA meetings are conducted each semester and students' progress reports are distributed to parents. Feedback from parents is collected and considered for the calculation of CO attainment and overall improvement.
- **Practical Courses:** Laboratory manual is prepared for all the experiments and is given to students. Course plans and course files are maintained for each lab.
- **Feedback System:** Timely feedback is obtained from the stakeholders and is analyzed and corrective actions are taken.
- **Management:** Executive Director meets Director, Joint Director, Principal, HODs, Teaching and Non-Teaching staff once in a month and gives guidance.
- **Course Exit Survey:** To assess the effectiveness of curriculum delivery, a course end survey is being conducted for all the courses and feedback is considered for further improvements.

File Description	Documents
Upload relevant supporting document	View File
Link for Additional information	https://sahrdaya.ac.in/wp-content/uploads/2022/04/1.1.1-Additional-information.pdf

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

Sahrdaya College of Engineering and Technology strictly follows the academic calendar released by APJ Abdul Kalam Technological University for both the even and odd semesters. The college has a special team of faculty headed by a convenor, who shall arrange college events in line with the dates mentioned by the university. The Academic Calendar includes details regarding the conduct of Continuous Assessment Tests (CAT), submission of assignments,

university exam schedule, arts and sports day and also regarding the details about fee payment. APJ Abdul Kalam Technological University conducts auditing in every department at least twice in an academic year and an academic report will be sent to the principal. Sahrdaya College of Engineering and Technology is graded Excellent / Very Good in the assessment Criteria key aspect which deals with Compliance to the Academic Calendar of University.

Academic Audit Report by University

Key Aspect

Rating given

2020-2021

Compliance to the Academic Calendar of University

Very Good

The Continuous Internal Evaluation is ensured through the following procedure:

- **Academic Calendar:** Based on the university academic calendar, the college has a special team of faculty headed by a convenor, who shall arrange college events in line with the dates mentioned by the university. It is then published on all notice boards and college website.
- **IQAC:** The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance; which would channelize all efforts and measures of the institution towards promoting its holistic academic excellence.
- **Continuous Assessment Tests (CAT) & Assignments:**
- Continuous Assessment Tests (CAT) and assignment questions are prepared based on CO's.
- Two Continuous Assessment Tests & two assignments are conducted for every course.
- Department wise scrutiny committee is to scrutinize each question paper set by the department faculty members to ensure

the quality of questions as per the University standards and give required suggestions/approval.

- **Tutorials:** Tutorials are conducted regularly and effectively as per the curriculum.
- **Evaluation of students performance in practical classes:** The lab record is evaluated on the same day and viva is conducted on each lab class
- **Result Analysis:** Proper evaluation of internal exams & university exams, tutorials & assignments are done by faculty members and are reviewed by the HODs and Principal
- **Assessment of Outcomes:**
 - Internal and assignment question papers mention COs and knowledge levels.
 - Appropriate tools are used for CO/PO assessment.
 - Targets are fixed & calculate CO/PO attainment.
 - **Progress Report:** Progress report of each student which shows the academic performance including attendance is available in Linways software.
 - **Feedback System:** Timely feedback is taken from the stakeholders & it is analyzed and action taken.

File Description	Documents
Upload relevant supporting document	View File
Link for Additional information	https://sahrdaya.ac.in/college-calendar/

1.1.3 - Teachers of the Institution participate in A. All of the above following activities related to curriculum development and assessment of the affiliating University and/are represented on the

following academic bodies during the year.

Academic council/BoS of Affiliating University

Setting of question papers for UG/PG

programs Design and Development of

Curriculum for Add on/ certificate/ Diploma

Courses Assessment /evaluation process of the

affiliating University

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	View File
Any additional information	View File

1.2 - Academic Flexibility

1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

11

File Description	Documents
Any additional information	View File
Minutes of relevant Academic Council/ BOS meetings	View File
Institutional data in prescribed format (Data Template)	View File

1.2.2 - Number of Add on /Certificate programs offered during the year

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

6

File Description	Documents
Any additional information	View File
Brochure or any other document relating to Add on /Certificate programs	View File
List of Add on /Certificate programs (Data Template)	View File

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

1229

File Description	Documents
Any additional information	View File
Details of the students enrolled in Subjects related to certificate/Add-on programs	View File

1.3 - Curriculum Enrichment

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

The curriculum includes various courses that address Environment, concern for the environment, awareness of hazards for the environment. For example, the first year B.TECH program includes an institute core course on "Sustainable Engineering" (based on the AICTE mandatory guideline). In addition to the above institute core courses, individual programs have included additional courses to address Environment and Sustainability. For example: 'Environmental Biotechnology' 'Sustainable Energy Processes' by Biotechnology; 'Environmental Impact Assessment' and 'Solid Waste Management', 'Environmental Engineering' by Civil Engg. The curriculum of PG programs also includes courses to address Environment and Sustainability.

Courses to address Human Values and Professional Ethics: The curriculum includes various courses to address Professional Ethics and Human Values. The curriculum also includes course on 'Personality Development and Communication' to develop human values and communication skills. In addition to the above institution core course, individual programs have included additional courses to address Professional Ethics and Human Values. 'Life Skills', 'Principles of Management' are some among them which deal

with ethics. The curriculum of PG programs also includes courses to address Human Values and Professional Ethics. In the present curricular structure, specific courses to address gender are not included. However, the campus ambience, the work culture provides opportunities for students to demonstrate professional behaviour. The Women Cell and the Anti-sexual harassment committee continuously offer various programs like Debate, seminar, panel discussions on gender sensitization. The impact of these programs is evident through the confidence portrayed by all students irrespective of their gender.

- GENDER

Women grievance cell:

- Women grievance cell plays an active role in empowering girl students.
- Women grievance cell was formulated in the college according to the Sexual Harassment of Women at Workplace (prevention, prohibition & redressal) Act, 2013.
- Women Grievance cell jointly with the student welfare committee of college had organised a one hour workshop session on "Value added products" by M/S.Urmila N.Pai -Trainer from the Pidilite group.
- International Women's day is celebrated every year.

- ENVIRONMENT AND SUSTAINABILITY

The curriculum includes various courses that address Environment, concern for the environment, awareness of hazards for the environment & Sustainability.

Sl. No.

Course

Description

1

Environmental Biotechnology S7 BT Core

To introduce scientific aspects of biochemical and cellular processes in the removal of environmental pollutants.

2

Sustainable Energy Processes S8 Global Elective

To introduce the current and potential future energy systems in a sustainable manner.

3

Environmental Engineering S7 BT Core

To introduce science and engineering of air, water and solid pollution prevention.

4

New & Renewable Sources of Energy S5 EEE Elective

To give sufficient knowledge about the promising new and renewable sources of energy.

5

Environmental Impact Assessment

S8 Global Elective

To study the various types of environmental pollution.

6

Environment and Pollution S5 CE Elective

To impart the various management techniques available for pollution abatement.

7

Disaster Management S8 Global Elective

To inculcate the basic concepts of disaster management.

8

Environmental Engineering - II S8 CE Core

To understand the various sources and characteristics of wastewater.

The curriculum includes various courses to address Professional Ethics & Human Values. The curriculum also includes courses to develop communication skills.

Sl. No.

Course

Description

1

Life Skills first Year, Core

Human Values, Global Issues & Code of Ethics.

2

Professional Communication

Second Year, Core

To develop vocabulary and language skills relevant to engineering as a profession.

3

Principles of Management Third Year, Core (2015 scheme)

To understand and apply a variety of management and organisational theories.

4

Professional Ethics

Third & Year, Core (2019 scheme)

To create awareness on ethics and human values.

In the present curriculum structure, specific courses to address gender are not included. However, the campus ambience, the work culture provides opportunity for students to demonstrate professional behaviour. The impact of these programs is evident through the confidence portrayed by all students irrespective of their gender

NSS

- NSS units of our college had organised several campaigns such as Clean Campus Green Campus, Planting of tree saplings.
- NSS units of our college along with Inspire India and Moozhikulam Nattariv Padanakalari has conducted a 3 day workshop on June 1 , 3, 5 as a part of Environment Day.
- NSS units of our college along with Green Report channel and Moozhikulamshala Nattarivu Padanakalari has conducted a 9 day webinar series from July 26 to August 3 in association with 2021 Earth Overshoot Day-July 29. Session is being handled by Mr E. P. Anil (Editor in chief , Green Reporter channel) on the topic Territory of land Daily thoughts. NSS unit of our college had planted 150+ plants made out of eco-friendly sapling bags.
- NSS Unit of Sahrdaya College Kodakara in association with World Yoga Day has conducted a webinar on "Revive vitality " by T Prabha (Certified yoga Instructor & Nutritionist)
- NSS Unit of Sahrdaya College Kodakara had organized a OSM (Open Street Mapping) mass awareness program on 31 January 2021 by MR.JOEL THOMAS GEORGE -NSS Program Officer -Mapathon Program Regional Coordinator (Thrissur Palakkad Region).
- Yoga club is also functioning in a regular basis

File Description	Documents
Any additional information	View File
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View File

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

32

File Description	Documents
Any additional information	View File
Programme / Curriculum/ Syllabus of the courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View File
MoU's with relevant organizations for these courses, if any	No File Uploaded
Institutional Data in Prescribed Format	View File

1.3.3 - Number of students undertaking project work/field work/ internships

106

File Description	Documents
Any additional information	View File
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	View File

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students

A. All of the above

Teachers Employers Alumni

File Description	Documents
URL for stakeholder feedback report	https://sahrdaya.ac.in/wp-content/uploads/2022/04/FEEDBACK-FORMS20-21.pdf
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View File
Any additional information	View File

1.4.2 - Feedback process of the Institution may be classified as follows

A. Feedback collected, analyzed and action taken and feedback available on website

File Description	Documents
Upload any additional information	View File
URL for feedback report	https://sahrdaya.ac.in/wp-content/uploads/2022/04/1.4.2-Additional-information.pdf

TEACHING-LEARNING AND EVALUATION**2.1 - Student Enrollment and Profile****2.1.1 - Enrolment Number Number of students admitted during the year****2.1.1.1 - Number of students admitted during the year**

347

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

2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)**2.1.2.1 - Number of actual students admitted from the reserved categories during the year**

170

File Description	Documents
Any additional information	View File
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

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

Strategies adopted for slow learners :

- Remedial Classes are conducted with an aim to improve the academic performance of the slow learners.
- Group Study System is encouraged with the help of the advanced learners.
- Academic and personal counseling are given to the slow learners by the teacher, advisor and the counseling cell.
- Bilingual explanation and discussions are imparted to the slow learners after the class hours for better understanding
- Provision of simple and standard lecture notes/course materials.

Strategies for the advanced learners :

- Advanced learners are encouraged to enroll in MOOC Courses.
- Assignment and Student Seminars on contemporary topics to enable them for placement
- Research Scholars are encouraged to conduct Seminars to the Final year UG and PG Students.
- Advanced Learners are provided coaching classes for competitive exams.
- Students are encouraged to participate and present papers in various Seminars/ Conferences/ Workshops/ Inter-Collegiate Competitions organized by other colleges. Students representing the college in various inter-collegiate meets are provided with the benefit of retest. Participation by the students in the in-house competitions such as Debate, Group Discussion, Problem Solving – Decision Making Exercises and Quiz Programmes are also encouraged. Talented students are motivated to participate in extra-curricular activities, exhibitions and cultural competitions.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/student-support/
Upload any additional information	View File

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

Number of Students	Number of Teachers
1344	100

File Description	Documents
Any additional information	View File

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

Teaching-learning methods adopted by the faculty members include Lecture Method, Interactive Method, Project-based Learning, Computer-assisted Learning, Experiential Learning etc. The Teaching - learning activities are made effective through illustration and special lectures. Courses are taught through Power point presentations to make learning interesting besides oral presenting methods. Lecture method: This method facilitates the teacher to interpret, explain and revise the content of a courses only for better understanding of the subject by the learners. Interactive method: The faculty members make learning interactive with students by motivating student participation in group discussion, role-play, subject quiz, news analysis, educational games, discussion and questions and answers on current affairs. Project - based learning: All department demands project based Learning. The teachers are the guides to the students in the process of preparation of projects. All the UG courses have project work in their final semester. Experiential learning o The faculty members foster learning environment by engaging in Teaching through demonstration, visual aids, Periodical industrial visits, Organizing exhibitions and Presenting papers. Student Seminars: The Student seminars are organized where in the papers are presented by students on recent IEEE papers or journals to enrich their learning experience.

File Description	Documents
Upload any additional information	View File
Link for additional information	https://sahrdaya.ac.in/ict-enabled-classrooms-seminar-halls/

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

Information & Communications Technology (ICT) enabled teaching methodologies and advanced technology are being followed by the faculty members in class rooms. The academic plan with budget, lesson plan, lab manuals and question banks with solution are made available at the very beginning of the semester. The use of multimedia teaching aids like, LCD projectors, classrooms with internet enabled computer/laptops/tablet systems are usually in use in classroom. The electronic resource packages like DELNET, NPTEL, SPOKEN TUTORIAL and Digital Library are available. The faculty members effectively utilize Audio Visual aids to demonstrate the concepts to the students using the resources from National Programme on Technology Enhanced Learning (NPTEL) to enhance the learning experience. USB Hard disk containing web and video courses (offline) from NPTEL are accessible to faculty and students from the server installed in the library. These courses are the part of LMS. Also Available on local Server. Sufficient number of books, Journals, e-journals and e-books are available in the library. The research journals are available online and facility for accessing these journals is provided through proxy server in the campus. All the departments conduct seminars, workshops and guest lectures on the new developments in the core subjects for effective teaching and learning by the faculty members and students in each semester. Seminar hall is equipped with multimedia facilities using ICT tools. Invited talks and webinars are conducted in seminar hall using ICT facilities.

File Description	Documents
Upload any additional information	View File
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View File

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

2.3.3.1 - Number of mentors

75

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	View File
Circulars pertaining to assigning mentors to mentees	View File
Mentor/mentee ratio	View File

2.4 - Teacher Profile and Quality

2.4.1 - Number of full time teachers against sanctioned posts during the year

100

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	View File
Any additional information	View File
List of the faculty members authenticated by the Head of HEI	View File

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

26

File Description	Documents
Any additional information	View File
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	View File

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

2.4.3.1 - Total experience of full-time teachers

714

File Description	Documents
Any additional information	View File
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	View File

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode.

Write description within 200 words.

- The internal exam committee has been formed under the supervision of the Principal.
- The date of each continuous assessment test(CAT) is scheduled and published in the academic calendar before the commencement of the semester.
- The question paper scrutiny committee is formed in each department with senior faculty members to verify the quality of the question paper. The scrutinized questions are documented.
- All the questions are mapped with the course outcomes
- The bloom's level of each question is addressed in the question paper.
- The exams are conducted by the internal exam cell in various classes with mixed branches to avoid malpractices.
- After the exam, the answer scripts are handed over safely to the concerned faculty members.
- Valued answer scripts are given to the students to verify their marks and rectifications and clarifications are made.
- The marks are entered for each question in the software Linways to keep the database of performance.
- The marks and performance can be accessible by the students and parents on the website.
- Assignments are conducted by subject teachers and documented.
- The regular class performance is also considered for the internal assessment to motivate the students in class performance.

File Description	Documents
Any additional information	View File
Link for additional information	https://sahrdaya.ac.in/college-calendar/

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

- Internal exams are conducted in a transparent way by the internal examination cell constituted by the principal.
- The faculty members inform the method of assessment and modules for each internal tests in the first class committee.
- The mark division for each module and question patterns are instructed to the students at the beginning.
- The students can approach the concerned teacher if they have any clarification in the assessment.
- The marks will be awarded or justification will be provided by the teachers if there are any issues in the evaluation of the answer scripts.
- The class committee meetings are conducted as per the academic calendar with class teachers and student representatives.
- The problems and issues of individual subjects are discussed in the class committee meeting and are rectified by the head of the department or will be escalated to the concerned authority.
- The meeting of student representatives of all the classes is arranged by principal periodically to discuss their grievances and issues. The actions taken are communicated to the students.
- The class advisors take care of each student's grievances and are solved in time in an efficient manner.

File Description	Documents
Any additional information	View File
Link for additional information	https://sahrdaya.ac.in/grievance/

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.

1) PEOs & PSOs of each department including the syllabi of all courses along with their COs are made available in the Institute

website (<https://www.sahrdaya.ac.in/>). 2) PEOs and PSOs are displayed in prominent locations of the campus for staff, students and public view. 3) PEOs and PSOs are displayed in Department office, Class rooms, Laboratories and Department library. PEOs and PSOs are also communicated to employers and Alumni through mails and discussion in the Alumni Meeting. 4) PEOs, PSOs and COs of specific lab courses are printed on lab manuals and issued to all students at the beginning of every semester. 5) The POs, PSOs and COs are listed in the course files prepared by the faculty handling each course. 6) During the class committee meeting and faculty meeting PEOs, PSOs, COs are reviewed among the students and staff members. 7) Vision and Mission of Institute and department are communicated to the parents during PTWA Meeting. 8) COs are communicated to the students during the introduction class itself and are reviewed at the beginning and after the completion of each module.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	https://drive.google.com/drive/folders/1EMnc_iJYUtfSLuuwycKXCR8eOxSaolyId?usp=sharing
Upload COs for all Programmes (exemplars from Glossary)	No File Uploaded

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

The assessment tools used for computing CO attainment are: Direct Assessment Tools which consist of Continuous Assessment Tests (CAT) conducted internally by the college and Semester End Examinations (SEE) conducted by the university. The Indirect Assessment Tool consists of the Course Exit Survey (CES). A clear Rubrics is framed for analysing each subjects. The course exit survey indirectly find level of attainment of COs framed. The Rubrics for assessment is as follows: 1. Direct Assessment Tools - 80%

- Semester End Examinations - 60%
- Internal Evaluation - 40%

a) Continuous Assessment Tests (CAT 1 & CAT 2 each of 40%) b) Assignments - 20% 2. Indirect Assessment Tools -20% At the end of the course, all the COs are measured using all the assessment methods and the attainment is calculated using the weighted average method. From the CO attainment, the PO & PSO attainment is calculated. This process is repeated for all courses in a semester.

After the attainment calculations, a thorough analysis on these attainment levels is done by each department. This analysis includes identifying the gaps and suitable measures to bridge the gap like organizing workshops, seminars and conferences which would help in the further attainment of the POs/PSOs.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	https://docs.google.com/spreadsheets/d/1smbhyOnVrxJmMNrmOxYr0lwOLpkA9kr-/edit?usp=sharing&ouid=114863195782886077580&rtpof=true&sd=true

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

376

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View File
Upload any additional information	View File
Paste link for the annual report	https://drive.google.com/file/d/18P4s8_vqoLsPvC1s4-q3S8ij9ZQgYWTf/view?usp=sharing

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

<https://drive.google.com/drive/folders/1iwOcx3f3IlZbS4Isklue0ChRu6TA9fvEl?usp=sharing>

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Resource Mobilization for Research

3.1.1 - Grants received from Government and non-governmental agencies for research projects /

endowments in the institution during the year (INR in Lakhs)**3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)**

1080667

File Description	Documents
Any additional information	No File Uploaded
e-copies of the grant award letters for sponsored research projects /endowments	View File
List of endowments / projects with details of grants(Data Template)	View File

3.1.2 - Number of teachers recognized as research guides (latest completed academic year)**3.1.2.1 - Number of teachers recognized as research guides**

16

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

3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year**3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year**

1

File Description	Documents
List of research projects and funding details (Data Template)	View File
Any additional information	No File Uploaded
Supporting document from Funding Agency	View File
Paste link to funding agency website	nil

3.2 - Innovation Ecosystem

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Sahrdaya Technology Business Incubator

On 16 th January 2018 a new venture, Sahrdaya Technology Business Incubator (STBI), a joint venture of Kerala State Industrial Development Corporation (KSIDC) was started. Dr. Christy Fernandez, chairman of KSIDC inaugurate the function. At present Sahrdaya is hosting five companies in our college through Sahrdaya Technology Business Incubator

IEDC

Innovation and Entrepreneurship Development Center is an institutional mechanism to create an entrepreneurial culture in Sahrdaya to foster the growth of innovation and entrepreneurship amongst the faculty, students, and common people. IEDC Sahrdaya is recognized as the coordinating center of Innovation and Entrepreneurship cluster 10 of APJ Abdul Kalam Technological University. The center is Awarded the Exemplary Performance Award of Kerala Startup mission and the Entrepreneurship Enabler Award of Government 2018 for its contribution to the entrepreneurial ecosystem in Kerala.

CSE -RED HAT ACADEMY

The Red Hat Academy curriculum involves hands-on instruction across platforms, middleware, and cloud technologies. Rather than learning theoretical skills, students learn practical skills based on use cases from thousands of enterprise implementations. We've made Red Hat Academy accessible to as many qualified academic institutions as possible. Eligibility is for nonprofit, degree-, certificate-, or diploma-granting institutions.

ASAP

Additional Skill Acquisition Programme (ASAP) is a joint initiative of the General and Higher Education Departments, Govt. of Kerala. The motto behind this program is to generate more employable skills in the student population of Kerala by providing sector-specific skill training programs along with regular academic studies. This special training would be conducted during vacation and other holidays. The training would be conducted in three levels,

Communicative Skills in English, Basic IT training and Elective Domain Specific Skill Course. The programs are developed, delivered, assessed, and certified with the active participation of the related industries to ensure labor market acceptance of the programs. HCI is collaborating with ASAP as a training service provider for Elective domain-specific skill courses.

IOT and Robotics

Centre for IoT and Robotics research (CIR2) was established in the year of 2018 with a view of promoting the IoT and robotics related research and studies. IoT facility is funded by the Kerala Startup Mission. Various development boards and components like sensors, actuators, communication devices, power supplies etc. required to make IoT related projects are available in the lab. Robotics lab is supported by IIT Bombay under their e-Yantra Lab Setup Initiative (eLSI). 'Firebird V' Robotic training kits and associated components are available to learn the basics of robotics. Under the centre, students are provided with regular hands on trainings in IoT and robotics during semester breaks.

Hardware Club

With a motive to provide a common platform for inter-disciplinary technical activities of the college the hardware club was launched in 2015. The club aims to technically strengthen the students by integrating their skills in various fields of engineering and technology.

Research Centres

Center for Research and Development commonly known as RDC supports R&D activities around the campus, especially among faculty members. A dedicated RDC council has been constituted for monitoring several progress in this direction. The activities carried out by the council includes the establishment of research labs, encouraging and offering guidance to R&D activities among faculty, periodic monitoring of funded projects, and follow-up of award-winning student projects, and promoting it to funded research projects. The college has been recognized as a SIRO (Scientific and Industrial research Organization) under DSIR (Department of Scientific and Industrial Research) which comes under the Dept of Science and Technology, Government of India.

Placement & HRD Cell

The objective of the HRD Department is transforming individuals into self-directed, focussed and high performing intellects. The institute has close relations with many IT companies and leading organizations that help its graduates getting good exposure and placement. The HRD syllabus focus on developing mastery in communicative skills in English and professional conversational skills needed to be competent and effective in the profession.

AGAPPE - Innovation Hub

Agappe Diagnostics Limited is an in vitro diagnostics company and the collaboration is to provide training to the students on Agappe products and services to establish a mutually beneficial relationship built on academic, scientific and technological cooperation which include project guidance, internship, training programs, industrial visits, industry- institution interface and Placements.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	nil

3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

22

File Description	Documents
Report of the event	No File Uploaded
Any additional information	No File Uploaded
List of workshops/seminars during last 5 years (Data Template)	View File

3.3 - Research Publications and Awards

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

2

File Description	Documents
URL to the research page on HEI website	https://sahrdaya.ac.in/rdc/
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	View File
Any additional information	View File

3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year**3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year**

21

File Description	Documents
Any additional information	View File
List of research papers by title, author, department, name and year of publication (Data Template)	View File

3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year**3.3.3.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during year**

38

File Description	Documents
Any additional information	No File Uploaded
List books and chapters edited volumes/ books published (Data Template)	View File

3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

Every year, NSS Unit and various departments of our college conduct various activities under which the students and staff participate voluntarily in community based services with the neighborhood.

1. To show concern towards nature, NSS volunteers of our college planted saplings and created a vegetable garden in their own home, to celebrate Environment Day.
2. NSS unit of the college conducted a book review activity as a part of Reading Day.
3. The importance of yoga, its benefits and acceptance across the globe are discussed, along with the basic asanas, pranayamas through online yoga session.
4. Conducted a webinar on the topic Novel coronavirus, preventive and response measures for future health.
5. Donated 6 Automatic Hand sanitizer made by our own students to different panchayath.
6. Organized a webinar in association with Environment Protection and Research Community (EPRC), discussed Disaster Management Techniques and Emergency flood kit.
7. Conducted a series of webinars on occasion of Nagasaki Day, International Youth Day and Independence Day in collaboration with International Human Rights Association.
8. A social campaign named 'beGandhianforaday' along with planting 100 saplings.
9. An awareness class was conducted on the topic Promotion of Mental Health and well-being among young adults.
10. Classes are conducted for students on life and success.
11. Orientation class on giving a new light hope to the most helpless human beings.
12. In connection with 72nd republic day, NSS unit conducted flag hoisting along with awareness on Folk remedies for backyard farming
13. Conducts Open Street Mapping mass awareness programme.
14. Organized a road safety rally accompanied with a flash mob in coordination with Kodakara Janamaitri police to give awareness to society.
15. Conducted 3 days of workshops to be aware about earth restoration tools and carbon neutrality.
16. Along with the collaboration of Moozhikulam Shala Nattarivu PadanaKalari and Green Report channel conducted classes about Earth Overshoot Day 2021.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/nss/
Upload any additional information	View File

3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

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

0

File Description	Documents
Any additional information	No File Uploaded
Number of awards for extension activities in last 5 year (Data Template)	View File
e-copy of the award letters	View File

3.4.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year

3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

34

File Description	Documents
Reports of the event organized	View File
Any additional information	View File
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	View File

3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

3.4.4.1 - Total number of Students participating in extension activities conducted in

collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

3790

File Description	Documents
Report of the event	View File
Any additional information	View File
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	View File

3.5 - Collaboration

3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

42

File Description	Documents
e-copies of related Document	No File Uploaded
Any additional information	No File Uploaded
Details of Collaborative activities with institutions/industries for research, Faculty	View File

3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

8

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	View File
Any additional information	View File
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	View File

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.

The college has an extensive infrastructure spread over 25 acres. The infrastructure includes four Academic Blocks (Administrative Block with 5430 SQM, Bio Block with 7895 SQM, Decennial Block with 9180 SQM, Knowledge Centre with 8370 SQM) with well-furnished Class Rooms for Undergraduate (UG) and Post Graduate (PG), Full-fledged Laboratories, Seminar Halls, Drawing Halls, Workshops, Conference Rooms, Board Rooms, Auditorium, Library, Staff Rooms, Exam Control Office, Training and Placement Centre, Computer Centres, Sick Rooms, Fitness center, Stationary Centre, Cafeteria, Reprographic Centres, Guest Rooms, Hostels, Chapel, ATM.

Administrative Area include Principal / Director Office with available space of 96 SQM, Board Room with available space of 100 SQM, Office with available space of 250 SQM, Department Offices/Cabin for Head of Dept with available space of 389 SQM, Class Room-Tutorial Room (UG) with available space of 3684 SQM, Additional Workshop/Labs with available space of 950 SQM, Class Rooms (PG) with available space of 900 SQM, Laboratories (UG/PG) with available space of 5607 SQM, Workshops - Basic (UG/PG) with available space of 1200 SQM, Drawing Halls with available space of 590 SQM, Seminar Hall with available space of 1195 SQM respectively and a total space of 14961 SQM .

The common facilities in the instructional area include Computer Center with available space of 550 SQM, Library & Reading Room with available space of 4410 SQM, Language Laboratory with available space of 96 SQM respectively and a total of 5056 SQM. The Computer facilities include Internet Bandwidth of more than 255 Mbps, Language Lab, and Printers (43 numbers).

The library facilities include 33402 Volumes, 9186 titles, 101 printed journals, IEEE, DELNET, IETE packages, 8256 Ebooks, Library Management Software, Reading Room Seating Capacity of 425 and MultiMedia P C (56 numbers). Separate Hostels for Men and Women (3600 SQM and 7260 SQM respectively) on the campus with all necessary facilities is provided for study and recreation. College is providing transportation facilities to various localities.

Sahrdaya Technology Business Incubator (STBI), a joint venture of Kerala State Industrial Development Corporation (KSIDC) is established on the campus. At present, SCET is hosting five companies in our college through Sahrdaya Technology Business Incubator. GE Design Lab opened up a new avenue that emphasized the significance and impact of Design Engineering in Medical Devices. The collaboration with Agappe Diagnostics Limited established Agappe lab to provide training to the students on Agappe products and services. It also enhances the soft skill sets and establishes a mutually beneficial relationship built on academic, scientific and technological cooperation. Other added facilities include Accenture computer lab, Robotics lab, and IoT (Internet of Things) lab. The institution has an excellent Training and Placement Centre. The website provides access to official information.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.sahrdaya.ac.in/wp-content/uploads/2020/03/4.1.1-Facilities.pdf

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

SCET has been maintaining a high standard in almost all games among engineering colleges. The Department of Physical Education plays a crucial and intrinsic part of student life on the campus. The department aims to cater an all-round sports, enjoyment and relaxation activities for students, staff, and faculty. The foremost order is to grant services that trigger growth, improvement, confinement of students in a state of the art and safe environment that develops vigor and well being.

The College offers multiple facilities on campus to cater to the physical development of students. The College has amenities for both Indoor and Outdoor games. The Physical Education Department is

giving systematic training and coaching for players in various games throughout the year. Leading teams are invited to SCET Campus for practice matches. To give competitive experience and exposures, SCET teams participated in all the Inter Private Engineering College Sports and Games. An annual sports meet is conducted every year in the college ground which could not be conducted during the Covid pandemic period.

The sports infrastructure specifications include Athletic Track of 400Mts 6 lane Badminton Courts(6 Numbers) indoor(13.40 x 6.10Mts), Basketball Court (2 Numbers) cement reinforced with acrylic fiber glass backboards, Chess Club, Cricket Ground (55Mts) boundary with Clay center Wicket, Cricket practice Nets (2 Numbers) with 22yard net Cage with Clay Wicket, Football field (105x60Mts), Health Club (2 Numbers) Single & Multistation Equipments separate for Boys & Girls, Table Tennis Table (2 Numbers) which are ITTF(International Table Tennis Federation) approved Volleyball Court (2 Numbers) with Outdoor Clay Surface (9x9 Mts) and a Yoga Center.

Yoga Classes are being conducted for all first-year students throughout the year. International Yoga Day is observed every year in which all the faculty members are also given one hour of yoga training by an expert which could not be conducted during the Covid pandemic period. Numbers of awards and recognitions for outstanding performance in sports and cultural activities at the state level have been accomplished in the past years. National Sport's day was celebrated in online mode with the active participation of staff and students.

The college encourages the students to take part in cultural activities that enable them to showcase their talent and creativity in various inter-collegiate events. The necessary training is provided through experts to the participating students. Talent's day is celebrated every year to give a platform for the first-year students to showcase their talents which could not be conducted during the Covid pandemic period. Department-wise association day is also organized which enhances teamwork among the students. Every year, SCET organizes, Arts Day, the cultural-adventure fest along with literary events on the campus. Arts Day was hosted online through Online Platform-Webex during Covid pandemic.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://sahrdaya.ac.in/pe/

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

50

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://sahrdaya.ac.in/ict-enabled-classrooms-seminar-halls/
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

32.31

File Description	Documents
Upload any additional information	View File
Upload audited utilization statements	View File
Upload Details of budget allocation, excluding salary during the year (Data Template)	View File

4.2 - Library as a Learning Resource

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

Sahrdaya Central Library, the multi-storey infrastructure marvel

with excellent amenities and facilities, functions as the pivotal Learning Resource Hub of the institution. The computerized library with immense sources of information completely meets the needs of students, research scholars and faculty members.

The library resources have been completely bar coded and automated using KOHA, a fully featured, scalable library management system. Koha includes modules for acquisitions, circulation, cataloging, serials management, authority fixing, flexible reporting, label printing etc. KOHA has also features of powerful searching, and an enhanced catalogue display that can use content from Amazon, Google, LibraryThing, Open Library, and Syndetics, among others. KOHA is web based interface -Koha's OPAC, circulation management and self-checkout interfaces are all based on standards-compliant World Wide Web technologies-XHTML, CSS and Javascript-making Koha a truly platform-independent solution.

Name of ILM software : KOHA

Nature of automation : Fully

Version : 20.11.01.000

Year of automation : 2021

A key aspect of the Centre is its thrust on facilitating self study in a variety of different ways including information literacy and study skill acquisition, a key role ignored rather than catered to, by the higher education library service centers in our country. The library facilities include 33402 Volumes, 9186 titles, 101 printed journals, 8256 E-books, Library Management Software, Reading Room, and Seating Capacity of 425 and Multi Media PC of 56 nos.

The Central library provides excellent academic ambience and facilities to its users for their self-learning and learning beyond syllabus, i.e, the faculty members, research scholars, students and other staff of the college can access thousands of research and learning resources in print and online, and derive benefits from the library which is committed to provide high quality resources and services. Excellent collection of books apart from the University prescribed Text books and Reference Books, 24x7 internet access with Wi-Fi connectivity, committed faculty members who motivate students in self-learning process and reputed print Journals. Online journals from IEEE, EBSCO, Delnet, IETE, IEI etc. support the students for self-learning activities. The library has a collection of NPTEL (National Programme in Technology Enhanced Learning activities)

lectures of all IITs' and IISC's which is made available throughout the campus using intranet for the use of faculty and students.

Central Library also provides access to NDLI (National Digital Library of India), Shodh Ganga, a reservoir of Indian theses provides a platform for research students to deposit their PhD theses, and make them available to the entire scholarly community in open access, and Online Courses through SWAYAM (Study Webs of Active -Learning for Young Aspiring Minds, MOOC (Massive Open Online Courses) and NPTEL.

Our college website provides link to Central Library. This link helps to search books, journals, magazines, CD/DVD collections, Institutional Digital Repository (managed by DSpace), various e-resources, News Letters, Library Services, rules and regulations, etc

The library amenities include reference, issue, return, renew, e-resources, Book schemes, internet facility-455 Mbps, language lab, Open Access System, OPAC & WEBOPAC, 10 hours service, overnight issue, department libraries- (EC, CS, BM, BT, EEE, and CE) The library has Barcode & Biometric enabled Access Control, Theft control, TV, CCTV surveillance, New Arrivals Display, Research Cubicles, Green Library, Conference Room, News House & Employment information Service, General Knowledge house, Reprographic service, Drinking water, Property counters, Rest rooms etc.

Library has special collections of Atlas, Hand Books, World Record Books, Encyclopaedias, CD/DVDs, Materials for Gate, GMAT, GRE, MBA, GK Books for Quiz Competitions, Career Magazines, Literature-Classics, Braille Kit and Books For the Blind etc. The library provides user friendly training programs including computer aided library use, discussions, debates and Expository talks, orientation program on library use for first year students etc.

Qualified, experienced and dedicated library staffs provide excellent services to the library users to use the library independently to enhance their skills and knowledge.

File Description	Documents
Upload any additional information	View File
Paste link for Additional Information	https://sahrdaya.ac.in/central-library/

4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources **A. Any 4 or more of the above**

File Description	Documents
Upload any additional information	View File
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	View File

4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

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

14.43

File Description	Documents
Any additional information	View File
Audited statements of accounts	View File
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

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

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

58

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

4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

Sahrdaya college of engineering and technology is well equipped with modern and sophisticated Computing facilities, to support the ICT needs of students and faculty. All the college blocks are connected to the central server by optical fiber. 24X7 connectivity will be there. A total of 806 computers are available in the campus, spreading over more than 25 various laboratories and centers and are supported by UPS back up. Computers are supported in collaboration with Microsoft through the Microsoft campus agreement and the latest open value Operating system.

Most of the system is loaded with academic packages as per the discipline, including Matlab, Orcad and a dedicated Dell Power edge rack data server which is accessible from inside the campus and around the world. The computational facilities in the campus are well connected through wired as well as wireless networks. College is subscribed to dedicated bandwidth of more than 255 Mbps protected with Hardware firewall Cyberoam 300iNG and Campus WiFi is accessible with WiFi controller Netgear WC7520 for both students and Faculty (24X7), to support the teaching and learning process.

All the facilities are extended to the campus hostels as well. There are several seminar halls which are equipped with e-learning solutions to support computer, Internet access training to teachers and students and other programs for technology upgradation. All classrooms are equipped with a projector, computer, network ports, and multimedia systems to realize Modern ICT based teaching and learning.

The library is elevated to the status of a digital library with a dedicated network and bandwidth, special digital zones and terminals are provided for the modern referencing. All books are barcoded and the digital catalog is accessible through the intranet.

Collaboration with google through the G-suit account, teachers can empower teaching methods with various applications from G-suit. All the internet connections inside campus secured with Hardware firewall by individual login credentials. Google cloud is used for the data back up and protection in academic and administrative levels. A technical supporting mechanism is implemented for staff and students through support mail and WhatsApp.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://sahrdaya.ac.in/cse/cse-department-labs/

4.3.2 - Number of Computers

708

File Description	Documents
Upload any additional information	View File
List of Computers	View File

4.3.3 - Bandwidth of internet connection in the Institution A. ? 50MBPS

File Description	Documents
Upload any additional Information	View File
Details of available bandwidth of internet connection in the Institution	View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

61.78

File Description	Documents
Upload any additional information	View File
Audited statements of accounts	View File
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View File

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.

The institution with its 17 years of experience has established efficient systems and procedures for maintaining and utilizing every facility under its various domains. Every year the management of SCET spends a considerable amount for maintaining the physical, academic and support facilities and thereby ensuring academic and infrastructure quality.

Maintenance of the Campus:

A building and resource maintenance section headed by the team of Chief Finance Officer (CFO) and a supervisor, is established to oversee the construction and maintenance of physical infrastructure and are working throughout the year.

Sewage Disposal:

The sewage mainly from the hostels and academic buildings are collected and treated inside the SCET Campus. The water by-product is utilized in gardening. Most Sewage is mainly biodegradable and most of it is broken down in the environment.

Solid Waste Management:

The dry solid waste from departments is collected on a daily basis within the campus and transported outside once in a while out of the campus after attaining sufficient quantity. The same is transported to the nearest landfill and solid waste management facility for proper disposal as per State Pollution Board norms.

Chemical Waste:

The quantity of Chemical Waste generated is very minimal. The chemical wastes after reducing its intensity are collected

underground through a common drain.

E-Waste disposal:

All un-serviceable E-Waste such as computers, printers, cables, floppies, CD's, mouse and keyboard etc. is collected at the store room. An agreement has been reached with M/s. Aspire Greens regarding the processing and disposal of the E-waste.

Cleanliness and Hygiene:

The Institution has employed approximately 30 cleaning staff for academic, administrative and hostel blocks, 15 staffs for gardening and external cleaning and 8 staffs for Hostel Mess.

Vehicle Parking:

The institution discourages own vehicle usage of students and most of the students adopts college bus facility. For the minimal number of student vehicles (two/four-wheeler) parking facility is provided. Also, separate parking facilities are provided for staff and visitors.

Electric Power Backup:

SCET Campus has two 250KVA generator sets to provide sufficient backup power supply in case of power failure from KSEB.

Potable Water Supply:

The Institute has three academic buildings provided with water coolers and purifiers to cater for safe drinking water. The sports complex/auditorium is provided with purified natural water in portable cans. The quality of drinking water is tested every three months. The fire extinguishers are refilled and kept in a serviceable condition throughout the year.

Budget:

The Equipment, instruments, infrastructure and other facilities require continuous maintenance and repair. Every year, sufficient funds are allocated towards the Maintenance fund. Separate funds are allotted to all H.O.D of the respective department for maintenance of the laboratories and the classrooms which are a part of the teaching and the learning processes.

ICT tools:

The computers are monitored and maintained time-to-time. A system admin team allocated for all academic buildings monitor the same. They also monitor the Campus Local Area Network (LAN) facility of the institution for ubiquitous network connectivity throughout the campus. All the stakeholders have equal opportunity to use this facility as per the rules and the policies of the institution.

Maintenance of Infrastructure:

The infrastructure maintenance is done by the maintenance section headed by the team of Chief Finance Officer (CFO) and a supervisor as and when required. General Insurance coverage is provided for Building, Furniture, fixture etc. Electrical and the plumbing related maintenance is done with the help of Institute appointed skilled persons and the expenditure is done from yearly allotted budget approved by the competent authorities.

Equipment:

All Major/advanced equipment are maintained by Annual Maintenance Contract (AMC). Minor Equipment's are repaired and maintained regularly.

Library:

The Library holdings consist of books, journals, Library Software (Presently using KOHA), e-journals, e-books etc. The books and journals are bounded. The stock verification is done as a part of regular maintenance. Central library works from 08.00 AM to 06.00 PM. The library has a catalogue facility for easy search of books for the benefit of students and staff. The library also provides LAN facility for the computers and they are loaded with the library software.

Canteen:

The Canteen Maintenance Committee headed by the Chief Finance Officer and Hostel wardens takes care of quality and price along with other related issues of the canteen. The management checks the quality preparation and availability of food frequently.

Additional Facilities:

The college provides three reprographic centres for students and

staff for taking printouts/copying necessary textbooks and other resource materials. The sports and games department of the college is meritorious and credit definitely goes to the adequate infrastructure of this department consisting of volleyball court, badminton court football ground, basketball court etc., which can be used by student and staff. The running track and the outdoor facilities are free to use for all the stakeholders. The college is also equipped with three cafeterias for refreshments of students during leisure period.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://sahrdaya.ac.in/wp-content/uploads/2022/04/4.4.2-link.pdf

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

356

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	View File
Upload any additional information	View File
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	View File

5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

125

File Description	Documents
Upload any additional information	View File
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	View File

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

B. 3 of the above

File Description	Documents
Link to Institutional website	https://sahrdaya.ac.in/student-support/
Any additional information	View File
Details of capability building and skills enhancement initiatives (Data Template)	View File

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

219

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

219

File Description	Documents
Any additional information	View File
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

A. All of the above

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

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

187

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File
Details of student placement during the year (Data Template)	View File

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

32

File Description	Documents
Upload supporting data for student/alumni	View File
Any additional information	View File
Details of student progression to higher education	View File

5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

17

File Description	Documents
Upload supporting data for the same	View File
Any additional information	View File
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	View File

5.3 - Student Participation and Activities

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

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

0

File Description	Documents
e-copies of award letters and certificates	No File Uploaded
Any additional information	No File Uploaded
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	No File Uploaded

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

Response:

Students Representative (SR) is an indispensable part of Academic and Administrative bodies/committees of the institution such as

- Alumni Association
- Training & Placement Cell
- Departmental associations
- Various other academic committees such as class/course committees of the college.
- Student Council
- NSS
- IEDC
- Technical Associations (IEEE,IEI , Hardware club)
- Industry - Institute Interaction Cell (IIIC)

Student Council

The executive committee of the student's council is elected from Class Representatives through the conventional parliamentary election process. Executive committee members consist of 17 members(12 office bearers +5 year-wise representative). The Student's Representative provides valuable feedback regarding curriculum, teaching-learning and evaluation process. Students Representative oversees the ready availability of teaching aids in classrooms and acts as a point of contact in the official communication process. The student representatives are regularly invited to various committee meetings and the views of students are considered while initiating teaching methodologies.

Additionally, the Students Council organizes various programs in relation such as Onam, Keralapiravi, Engineer's day and Teacher's Day and is responsible for the smooth execution of the various aspects related to the college annual arts and sports event. Thus, Students Council contributes to a healthy interaction among students and teachers regarding academic, co-curricular and extra-curricular activities of the college.

NATIONAL SERVICE SCHEME

? National Service Scheme (NSS) was introduced with the primary objective of developing the personality and character of the student youth through voluntary community service. ? "Education through Service" is the purpose of the NSS. The ideological orientation of the NSS is inspired by the ideals of Mahatma Gandhi. ? College days are made more memorable with NSS activities. This provides us with an opportunity to work for the community. The NSS is a platform where we consider the happiness of others before ourselves.

The institution encourages the students to be a part of the NATIONAL SERVICE SCHEME for their all-round development. The NSS expects students to grow, as a matured human individual through social and community services. The NSS aims at shaping the students' personality through various camps, seminars and invited talks together with social works. A student has to complete 120 hours of campus /community work in One year. The unit of NSS is a self-financing unit with a total of 100 volunteers (50 from IInd year, 50 from IIIrd year)

Composition of NSS

The volunteers are divided into groups/committees and there is a leader for each group. The main committees are Publicity, Poster ,Creative, Program, Documentation ,Notice Board. NSS volunteers meetings are held once in a month. Executive committee meetings are held occasionally.

Professional Bodies

Every year, a good number of co-curricular activities, both at the department level and college level are organized in the college. Co-curricular activities under the following labels are arranged in the college.

IEEE Student Chapter / BRSI / BMESI / IEI Student chapter / CSI

Institution of Engineers Student Chapter

Activities of Department Association which includes National/International conferences, workshops and seminars other activities organized by the college union/students. Participation of the students is encouraged in various seminars, workshops, competitions and winners as well as participants are appreciated. Students are encouraged to create and innovate solutions and present the same in paper presentations/conferences, exhibitions or competitions, tech-fests held in different colleges under the APJ Abdul Kalam Kerala Technological University to enhance their knowledge. The participants are felicitated in the college assembly. The achievements are published in the technical magazine by each department. There are exhibitions organised within the college for each semester and relevant topics are given to the students for micro, mini and semester projects. Groups are formed with identified talents.

IEDC

Innovation and Entrepreneurship Development Center is an institutional mechanism to create an entrepreneurial culture in Sahrdaya and the nearby places to foster the growth of innovation and entrepreneurship amongst the faculty, students and common people.

IEDC Sahrdaya is recognized as the coordinating center of Innovation and Entrepreneurship cluster 10 of APJ Abdul Kalam Technological University. The center is Awarded the Exemplary performance Award of Kerala Startup Mission and Entrepreneurship Enabler Award of Government 2018 for its contribution to the entrepreneurial ecosystem at Kerala.

IEDC Skill Clubs are promoted by IEDC for the purpose of skill development attitude among the students. These clubs are aiming to create a maker culture among the students. Also start-up boot camp is a student focused program.

Various Clubs

Various clubs are in the institute for the purpose of developing skill, curiosity, technical confidence, maker culture, self learning, updating knowledge about future technologies and peer skill sharing among the students. All the clubs are funded and coordinated from IEDC . Each club works under a faculty member as advisor and a Student Club Lead.

- Hardware Club
- Coders Club
- Creative Club
- Media Club
- Future Tech Club
- ECO club

Industry - Institute Interaction Cell (IIIC)

The Industry-Institute Interaction Cell is functioning in the college as a bridging forum between industries and the college, for mutual benefit. The industries/organizations help the college by sponsoring labs for on campus training for the students and placement to deserving candidates. Further, the industries encourage innovative ideas in the field of engineering and technology.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in
Upload any additional information	View File

5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

13

File Description	Documents
Report of the event	View File
Upload any additional information	No File Uploaded
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions) (Data Template)	View File

5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of

the institution through financial and/or other support services

Response:

Sahrdaya College of Engineering and Technology, Kodakara, was established in 2002. The first batch was passed out in 2006. An informal Alumni Association of Sahrdaya college Engineering Alumni Association (SCEAA) was formed in 2006. The students formed the association with a view to maintaining their warm bond with their campus. In 2018, the college decided to initiate the formal registration process of the Alumni Association. The Sahrdaya Engineering College Alumni Association was officially registered with the registration number TSR/TC/422/2018.

The main objective of this association is to

1. To serve as a forum to promote and foster relationships among the alumni, the students, the staff, and the management of sahrdaya.
2. To help the Alma mater in its effort to achieve excellence in technical and professional education.
3. To actively and constructively participate in the well-being of the Sahrdaya College of Engineering & Technology, by utilizing the goodwill, of professional engineers of various disciplines spread all over the world.
4. To institute scholarships, revolving loan funds, prizes/medals, etc., for the deserving students of Sahrdaya.
5. To maintain continuous interaction between the past and present students by publishing a newsletter, holding periodical Alumni day celebrations giving awards to the best alumni, or by any other means as decided by the association.
6. To contribute towards improving entrepreneurship development activities, campus placements, library, and centers of excellence at Sahrdaya.
7. To arrange seminars and training programs by eminent Alumni and other personalities for the benefit of students and alumni.
8. To promote entrepreneurship and to educate them on technical matters and better utilization of funds made available from financial institutions through workshops, seminars, lectures, etc, and by providing training to improve the quality of the human

resources of business organizations.

Features Of Alumni Association

? The alumni from the major strength of an institution. SCET started in the year 2002 and the first batch of students passed out in the month of June 2006.

? An executive committee was constituted in the year 2006 with Prof K T Joseph as the president and Dr. Nixon Kuruvila as the secretary.

? Currently, the alumni association is functioning well under the guidance of Principal Dr.Nixon Kuruvila as President, Asst. Professor Priya Benny as Secretary and Asst. Professor Jasmy Davies Treasurer.

? Association meets twice in an academic year as it is the flag bearer of the developments in the institution.

? A bank account was opened to receive monetary contributions and do creative spending in a systematic way.

? The main focus is on acquiring a job and working in diverse job environments including working out of state, abroad, and working in a company handling different portfolios Enrollment

? The Association and Management have decided that all the pass-out B.Tech and M.Tech students are enrolled in the alumni association. The Membership fee is Rs 1000/-. Contribution of Alumni Association

? The most important contribution of the alumni association is that the members share their experiences with their junior students. The association conducts alumni interactions very often.

? The alumni are also a great help for placement activities. ? Technical training and aptitude training programs were conducted during this period.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/secaa/
Upload any additional information	View File

5.4.2 - Alumni contribution during the year **D. 1 Lakhs - 3Lakhs**

(INR in Lakhs)

File Description	Documents
Upload any additional information	View File

GOVERNANCE, LEADERSHIP AND MANAGEMENT**6.1 - Institutional Vision and Leadership**

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

VISION CENTERED ACTIVITIES

The social responsibility of the institution is driven by the process of defining and measuring "outcomes" as well as core values that relate results to the purpose and its administration is largely the act of effectively balancing social accountability to the dynamics of the marketplace. The following Vision and Mission statements of the institution articulate the cornerstones that direct to shape all the commitments and undertakings of this institution. The institution has revised its Vision and Mission in September 2019 without changing its focus.

The new vision-mission statements are

Vision: Evolve as a leading technology institute to create high caliber leaders and innovators of global standing with strong ethical values to serve the industry and society.

Mission:

Provide quality technical education that transforms students to be knowledgeable, skilled, innovative and entrepreneurial professionals.

Collaborate with academia and industry around the globe, to strengthen the education and research ecosystem.

Practice and promote high standards of professional ethics, good discipline, high integrity and social accountability with a passion for holistic excellence.

Institutional Core Values :

Unending pursuit of excellence, Unrestricted diversity and open-to-

all inclusiveness, Uncompromising transparency in all functional domains, Total commitment to social responsibility and ethical values, Integration of knowledge and work, Urge for research and innovation.

The Vision and Mission statements define the institution's distinctive characteristics: Qualitatively upgraded education and personality enhancement programs prepare the young engineering students to grab opportunities at a global level. Sahrdayans will be ideally brought up citizens, and the nation can rely on them to fulfill its hopes and aspirations. Imparting quality, and technical education, Sahrdayans have been accepted in the worldwide work environment, and this is a vision to be realized in the coming years. With functionally useful, socially responsible, and morally uplifting education as its core agenda, the students are prepared to meet the tough demands that contemporary society produces. The founders have envisaged the vision of providing a skilled and competent workforce to society by imparting quality education and apt training.

Some of the measures envisaged are: The institution especially emphasizes especially on Outcome Based Education and Project-based Learning with well-equipped laboratories and infrastructure. Our college established various Institutional mechanisms such as IEDC, RDC, and STBI to foster the growth of research, innovation, and entrepreneurship. This catalyzed the growth of techno-entrepreneurial culture and the campus has evolved as a hub of such activities IEDC Summit 2019 for aspiring entrepreneurs hosted in our college, University-sponsored Tech-Fest, Tech-Top National Project Competitions, "Hack 4 People" Hackathon and TEDxSahrdayaCET are hosted in our college. The institution has good campus placements. Special focus is given to bridging the gap between Industry and Academia through Industry Institution Interaction. It has nurtured and produced a plethora of famous alumni who have a positive impact on society through their contribution to the country and to the development activities of the Institution. This College is fully committed to the mission of training the youth in technology for the workplace at global standards with the professed intention of changing the destiny of the nation.

File Description	Documents
Paste link for additional information	www.sahrdaya.ac.in
Upload any additional information	No File Uploaded

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

Decentralization: Institute has a mechanism for delegating authority and providing operational autonomy to all the various functionaries to work towards a decentralized governance system.

1. **Principal Level** The Governing body delegates all the academic and operational decisions based on policy to the Academic Monitoring Committee headed by the Principal in order to fulfill the vision and mission of the institute. The Academic Monitoring Committee formulates common working procedures and entrusts the implementation to the faculty members.

2. **Faculty Level:** Faculty members are members of various committees/cells and are allowed to conduct various programs to showcase their abilities. They are encouraged to develop leadership skills by being in charge of various academic, co-curricular, and extracurricular activities. They are given authority to conduct industrial tours and to have to tie up with industry experts.

Also, they are appointed as coordinators and convenors for organizing seminars/workshops/conferences/FDP. For the effective implementation and improvement of the institute, various committees are formed. Other units of the institute like sports, library, store, etc. have operational autonomy under the guidance of the various committees/cells.

3. **Student Level**

Students are empowered to play an active role as a coordinator of co-curricular and extracurricular activities, and social service group coordinators.

Participative Management: The institute promotes a culture of participative management by involving the staff and students in various activities. All decisions of the institution are governed by the board of management. Both students and faculty members are allowed to give suggestions to improve the excellence in any aspect of the Institute.

Strategic Level: The Director, Principal, Academic Coordinator (UG, PG), and Staff members are involved in defining the policies and procedures, framing guidelines and rules regulations pertaining to admission, placement, discipline, grievance, counseling, training placement, library services, etc., and effectively implementing the

same to ensure smooth and systematic functioning of the institute. For the various programs to be conducted by the institute all the staff members will meet, discuss, share their opinions and plan for the event and form various committees involving students and coordinate with each other. Faculty members and staff members are also involved in deciding academic activities and examinations to be conducted by the college.

Functional Level: At the functional level, the faculty members participate in sharing their knowledge by discussing the latest trends in technology and the academic progress of students. Staff members of the audit department and institute are involved in the preparation of the annual budget for the institute.

Operational Level: The Director of the institution is a member secretary of the Governing Body (GB). The GB gives suggestions and monitors the procurement, introduction of new programs, and welfare activities. The Principal of the institution is responsible for the academic, non-academic, and administrative activities of the institution. On behalf of the institution, he interacts and corresponds with AICTE, UGC, and Affiliating University. The budget is earmarked for faculty members and students to participate in various programmes organized by the institute.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	No File Uploaded

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

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

The management focuses on a systematic and continuous process that aims at the long-term and short-term objectives of the institution. The college achieves good results (achieved No.1 among all colleges affiliated with Calicut University) in the state. It aims to implement outcome-based education in the system and strives for its graduates to possess distinguished academic and interpersonal skills. The management feels that the quality of faculty and the education system has a critical role to play in an institution to reach its full potential. With this in perspective, the college

management has taken strategic measures to recruit highly specialized and skilled faculty to join the workforce. This is expected to contribute to the growth of the institution as well as improve the resources available for the student community of the institution.

Faculty with PhD

To ensure a core-strong knowledge and improve research, the management aims to have more faculty with Ph.D. Qualification at all levels. The management has introduced initiatives for encouraging faculty to pursue Doctoral Degree such as study leave for faculty pursuing Ph.D., Continuous augmentation of labs with state of the art equipment and software, etc. There has been a considerable increase in the number of faculty with Ph.D. Degree during the assessment period. Faculty with a Ph.D. are better equipped to guide research projects and Ph.D. scholars thus contributing to the global research pool.

File Description	Documents
Strategic Plan and deployment documents on the website	No File Uploaded
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	No File Uploaded

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

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

The Executive Director is the final authority that approves the Quality Policy, students request fee waivers. His role is also to ensure that corrective and improvement actions are initiated. He approves the department-wise budget before submitting it to the board for passing the budget. The Executive Director is also involved in the selection of staff.

The Finance Officer is in charge of all financial transactions of the Institution. He is a member of the Trust Board, reviews monthly

accounts, and compares with the budget. He is a member of the Purchase Committee.

The Advisor extends support to the Director in the day-to-day functioning of the College, in various areas. He supports the Director and Principal for smooth conduct of all academic-related programs as per AICTE/University norms. The Advisor serves as a member of the Advisory Board/ Academic Council and is involved in all activities by giving valuable advice for the progress of the Institution.

The Director advises the Executive Director if required for the college administration - General and academic. She makes necessary arrangements to make sure that the mandatory requirements insisted by the statutory bodies, like AICTE, Government and University are fulfilled.

The Joint Director assists the Director in all the routine functions of the Institution and continues to engage in theory/practical classes in his/her area of specialization. She monitors the Staff attendance, leave requests of staff and students in the Bio block. The Joint Director serves as a member of the Advisory Board/ Academic Council and is involved in the activities and gives advice for the progress of the Institution.

The Principal serves as a member of the Advisory Board/ Academic Council and takes care of the smooth day-to-day functioning of the College as per the directions of the Management and norms of AICTE and the University. He maintains general discipline within the campus, especially among students.

HOD:-Majority of academic activities are being handled by faculties in the department guided by the head of the department. The head of the department monitors the department activities, and conducts periodic meetings of all respective faculty members actively involved in handling academic activities in the department.

Administrative committees:- The institution has 40 administrative committees to continuously monitor/guide the academic and administrative activities. The committees comprise key stakeholders including administrators, faculty, staff, alumni, parents, and students.

The roles and responsibilities of the management bodies are documented in the Quality Manual (Reference Proof: Quality Manual)

The service rules for staff include adherence to the rules of the institution as well as duties as dictated in academic and non-academic aspects of the curriculum. The procedures, recruitment, and promotional policies are defined for all teaching and non-teaching staff. These are clearly dictated in the HR policy manual.

(Reference Proof: HR Policy Manual)

Grievance Redressal System: The institution established the Student Grievance & Redressal Cell for the purpose of redressing the grievances of students and parents. The respective students/parents and others represent their grievances to the Cell via the Grievance Redressal Portal on the college website.

(Reference Proof: Website link to the portal <https://sahrdaya.ac.in/>)

Links:-

<https://sahrdaya.ac.in/>

<https://sahrdaya.ac.in/grievance/>

<https://sahrdaya.ac.in/management/>

<https://sahrdaya.ac.in/governing-body/>

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Link to Organogram of the institution webpage	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	No File Uploaded

6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Document	No File Uploaded
Screen shots of user inter faces	View File
Any additional information	View File
Details of implementation of e-governance in areas of operation, Administration etc(Data Template)	View File

6.3 - Faculty Empowerment Strategies

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

The various welfare measures for faculty, staff, and students are:

Faculty Welfare Measures

1. Staff Savings Scheme (SSS)
2. Maternity Benefits
3. Gratuity
4. Group Insurance
5. Excellence Awards
6. Silver Ring After 5 Years Service
7. Transportation facility
8. Faculty Quarters
9. Sponsorship For Training
10. Faculty Research Seed-money Grant (FRSG)
11. Incentives
12. Emergency Medical Expense
13. Driving School Facility
14. Gym Facility
15. Morning & Evening Tea
16. Hostel Facility for bachelors
17. Faculty/Staff Get-Together
18. Family Get-Together / Tour
19. Staff Tournament
20. X' Mas / Onam Celebrations
21. X' Mas Gift

Staff Welfare Measures

1. Driving School Facility
2. Emergency Medical Expense

3. EPF
4. ESI
5. Family Get Together / tour
6. Gym Facility
7. Gratuity
8. Group Insurance
9. Hostel Facility for Staff
10. Incentives
11. Maternity Benefits
12. Morning & Evening Tea
13. Scholarships to Children Of Staff In SCET
14. Silver Ring After 5 Years Service
15. Staff Tournament
16. Staff/faculty Get Together
17. Transportation facility With Half Rate
18. X' mas Gift
19. X' mas / Onam Celebrations

Student Welfare Measures

1. Annual Celebrations
2. Arts & Sports With Financial Assistance
3. Other Celebrations such as Fresher's day
4. Convocation
5. Counselling
6. Driving School Facility
7. Emergency Medical Expense
8. Excellence Awards & Financial Assistance
9. Gym Facility for girls and boys
10. Group Insurance
11. Hostel Facility
12. NSS
13. Refreshments in Meetings
14. Scholarships and Endowments
15. Send-Off to Graduates
16. She-Care facility
17. Study Tour
18. Transportation facility
19. X'mas / Onam Celebrations
20. Yoga
21. Placement Day

SAHRDAYA INCENTIVES

- Faculty attending reputed International Conference outside the country and presenting papers shall be paid as follows:

1. 50% of the Conference registration fee subject to a maximum of Rs. 25,000 (Rupees Twenty five thousand)
 2. 50% of the actual flight ticket fare is limited to a maximum of Rs. 50,000/-.
 3. Faculty have to apply through college authorities to funding agencies like UGC/AICTE/DST etc. at least 6 months earlier to the conference and in case the faculty is receiving a travel/registration grant from any agency, the amount of grant given from the college should be refunded after meeting the actual travel and registration expenses.
 4. The above incentives are limited to any one faculty in a financial year according to seniority and rotation.
 5. A faculty member who has availed of this facility will be further eligible only after 5 years.
 6. Faculty attending National / International conferences should present this paper in the immediate faculty meeting.
- Presenting paper in reputed National conferences: Management will reward Rs 1,000 (Rupees One thousand) for presenting a paper at a national conference if the paper is published in conference proceedings with ISBN. The incentive is subject to a maximum of Rs 3,000 (Rupees Three thousand) in a financial year.
 - Incentives for research projects: An honorarium of Rs.10,000 will be granted by management to faculty who is the principal investigator for a research project funded by State or National Agencies like UGC, AICTE, CSIR, DET, DBT, ISRO, DAE, IET, etc. on completion of the project. The value of the Project should be Rs 10,00,000 (Ten Lakh) or more and the project should be completed on time.
 - Incentives for Research publication: Faculty members are eligible for incentives of Rs.3000 per year for every research publication in SCI-indexed journals. If the paper is authored by more than one person, the amount will be shared by all the authors who are associated with SCET. The papers published should include the name of the institution "Sahrdaya College of Engineering & Technology".
 - Consultancy projects: Faculty members will be eligible for suitable incentive/share for taking up consultancy works from Industry, Research Organizations, Pvt. Firms etc.
 - Incentives for Performance of Faculty: TA/DA to staff on official duty: Staff members deputed from the College on official duty for attending meetings representing the College,

accompanying students for competitions, etc., is eligible for registration fee and TA/DA as follows:

Registration fee: Actual on producing the receipt

TA: Actual bus/ Sleeper class train fare

DA: 250 per day (inside the State)

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	No File Uploaded

6.3.2 - Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the year

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

0

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	No File Uploaded

6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

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

8

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	No File Uploaded
Reports of Academic Staff College or similar centers	No File Uploaded
Upload any additional information	No File Uploaded
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View File

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

85

File Description	Documents
IQAC report summary	No File Uploaded
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	No File Uploaded
Upload any additional information	No File Uploaded
Details of teachers attending professional development programmes during the year (Data Template)	View File

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

Faculty members of Higher Educational Institutions today have to perform a variety of tasks pertaining to diverse roles. In addition to instruction, faculty members need to innovate and conduct research for their self-renewal, keep abreast with changes in technology, and develop expertise for the effective implementation of curricula. They are also expected to provide services to the

industry and community for understanding and then contribute to the solution of real-life problems. Another role relates to the shouldering of administrative responsibilities and cooperation with other faculty, Heads-of-Departments and the Head of the Institute. An effective performance appraisal system for faculty is vital for optimizing the contribution of individual faculty to institutional performance.

The system was adopted after a thorough discussion and review. The performance review gives a great opportunity to the faculty concerned and the department to look into the areas for improvement and take necessary remedial steps. The purposes of this evaluation are the following:

- a) Assess and promote excellence in the teaching/learning process.
- b) Meet the educational needs of students and the community by continuous monitoring instructional performance.
- c) Provide a constructive framework for evaluating faculty performance by identifying areas of strength and areas for improvement in classroom instruction.
- d) Provide a basis for professional growth and development.

The performance of the faculty is evaluated at the end of every year relative to the quality of teaching, contributions to teaching and research, etc. in a prescribed format. The goal of the performance appraisal system is to identify gaps in teaching and learning and provide the necessary directions and guidance to support each individual faculty for assurance of quality. It provides feedback on employees' performance to both the employee and the institute. The major decisions like probation declaration, promotions in higher pay scales, wage hikes, and training needs are taken based on this method.

Based on the teacher's performances, Academic Performance Index (API) scores are proposed for (a) Teaching related activities (35%) (b) Research (40%), and (c) Services (25%). The institution has a well-defined faculty appraisal system in which the contributions of the faculty in diverse roles are assessed.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	No File Uploaded

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The accounts of the college are audited regularly as per the government rules. SCET has separate internal departments. The internal auditor checks receipts including fee receipts and payments with vouchers and necessary supports. He also ensures that all payments are duly authorized. The external auditor conducts statutory audit at the end of the financial year. After the audit thereport is sent to the management for review. The audit statements are uploaded on SCET website. The college fills income tax returns every year within the stipulated time.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/audited-statements/
Upload any additional information	View File

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

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

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	View File
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	No File Uploaded

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

MOBILIZATION

- Tuition fees collected from students constitute our major source of income.
- SCET receives Projects Grants from AICTE /KSCSTE for various projects conducted by students.
- Our institution has been identified as a center for various online examinations such as GATE, CAT, JEE, AIIMS, IBPS, JIPMER, RRB, PSC, SSC, KVPY, UGC NET, NEET-PG, NATA, TOEFL. Payments are received for conducting the same.
- Contributions of the Alumni are utilized for student development and welfare activities.

OPTIMAL UTILIZATION

Recurring Expenses:

- The fee collected is utilized to meet recurring expenses such as salary, academic activities, staff welfare, and college promotional expenses.

Infrastructural Development and Facility Enhancement:

- Management allocates budget for infrastructural development and to create and upgrade the facilities in tune with the modern trends to meet the requirements.
- According to the financial requirements of each department, the budget amount will be allocated annually.
- Laboratories are upgraded according to the norms of AICTE and University.
- Maintenance works are carried to keep the infrastructure facilities in good condition as per AICTE norms.
- We also provide updated software and hardware to the students for excelling in academics and the latest innovative projects.

- Purchase of Textbooks and Subscription of journals for Library.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	View File

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

The IQAC of our institution aims to enhance the quality of education.

Practice I

Placement Promotion Activities

- SCET always focuses on the overall improvement of students thereby providing them a platform to showcase their capability and helping them to earn the desired career which opens up a new world.
- The students are categorized based on their skill sets and ability to grasp the concepts and they are incorporated with training that helps them to groom themselves into professionals.
- The first-year students are given life skill training which improves personal self-management and social skills.
- Aptitude Training is given from the first year which helps them to improve their Quantitative, Reasoning & logical skills which in turn results in clearing the recruitment-oriented test and common entrance tests.
- Soft skill training helps to groom interpersonal skills.
- Company-specific mock tests and interviews are availed by students before they attend the recruitment.
- Alumni are invited to campus to motivate the students and to make them aware of the industry trends, which helps to upgrade

their technical knowledge with the needs of the industry. These types of training programmes helped the students to acquire placements in different companies. The college keeps updated about each student even after they join their career that creates a special bond between the alma mater and the alumni

Practice II

IIIC & IEDC

IIIC

Realizing the relevance and importance of interaction between Technical Institutions and Industry, Industry Institute Interaction Cell (IIIC) was formed in SCET.

- IIIC is looking for effective interaction between industry, research organizations, and reputed institutes to improve the quality of technical education and enhance the employability of graduates.
- It helps to meet the needs of the industry. It provides input to better teaching-learning processes and better industrial exposure to students thereby enhancing practical knowledge and self-confidence.
- MoUs were signed with many industries from different disciplines of Engineering and Management to ensure effective collaboration between industry and institute in a formal and systematic manner.
- Many activities are being organized regularly at the department level.

IEDC

- Innovation and Entrepreneurship Development (IEDC) is being promoted in educational institutions to develop institutional mechanisms to create an entrepreneurial culture and to foster techno-entrepreneurship for the generation of wealth and employment.
- The coordination committee of IEDC of SCET with

representations from students and faculty members from all departments and activities are being organized with the support of the Kerala Start-up Mission (KSUM).

- Every year the IEDC of SCET organizes various activities. IEDC organizes 'Idea Fest' every year. This event focuses exclusively on innovative ideas from students and enables them to participate in state-level Idea Fest competitions conducted by KSUM. One idea from each department is selected and provided with the financial support of Rs.5000/- for prototype development.
- KSUM initially granted Rs 2 lakhs and after ensuring the effective utilization of funds they sanctioned an additional Rs 2 lakh and allotted Rs. 20000/- for conducting "Technical Workshops in Future Technologies".

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/igac/
Upload any additional information	No File Uploaded

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

The IQAC continuously monitors and takes necessary actions to improve the quality of the teaching-learning process. IQAC has put efforts to promote academic excellence and overall performance for the continuous improvement of the institution. The Principal and HODs conduct meetings regularly, to monitor the teaching-learning process of the departments. HOD in turn circulates the information to the teaching and non-teaching faculty of the department, through departmental meetings.

Outcome-Based Education (OBE)

- OBE focuses on the knowledge, skills, and attitude of the graduates as the most important aspect of education.
- Instead of output-based education, OBE relies on outcomes that are assessed and enable students to achieve their goals.

- The quality assurance and accreditation practices of the institution are based on this practice.
- The design of OBE starts by defining the vision and mission of the Institute and departments, POs defined by NBA, PEOs, PSOs, and COs. Internal and external stakeholders, course coordinators, Program coordinators, DAC, and IQAC are involved in this design phase.
- The semester plan and course plan are prepared in advance with reference to University Academic Calendar.
- Course objectives and outcomes are discussed at the beginning of each module.
- Internal Tests and Assignments questions are mapped to COs and Bloom's Taxonomy.
- Rubrics are defined to evaluate direct and indirect attainment levels for COs, POs, & PSOs. The direct assessment tools considered are internal tests, assignments, and University examinations. The indirect tools considered are the Exit survey, Employer survey, and Alumni survey.
- The COs, POs, PSOs attainment calculations are in practice throughout the year.
- As the OBE system is in practice, all the quality improvement strategies proposed by the different academic bodies in the institute are well implemented.
- The OBE system works towards continuous improvement of the students and proposes remedial actions; it also gives active participation and a better insight to all stakeholders to realize the vision of an institute.

Internal Assessment

- IQAC has introduced a method of preparing question papers for every internal assessment in which the course coordinator sets question papers, verified by the scrutiny committee, and finally approved by HoD.
- Question paper setting is based on Bloom's Taxonomy and indicates course outcomes and Bloom's level.

- Internal assessment tests are conducted in the prescribed format similar to the University examination.
- Invigilation for the same is done by faculty members. The test question paper is discussed in detail after every internal assessment. Marks obtained are uploaded in AMS(Linways) and they will be displayed to students and Parents.
- Weaker students are identified after each internal assessment and remedial classes and tests are given accordingly. Assignments are also given to students as per university regulations. Attainment is calculated based on the internal test, University results, direct and indirect assessments

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/igac/
Upload any additional information	No File Uploaded

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://sahrdaya.ac.in/annual-report/
Upload e-copies of the accreditations and certifications	View File
Upload any additional information	View File
Upload details of Quality assurance initiatives of the institution (Data Template)	View File

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 year

Our college has taken a number of steps to ensure equality of opportunity and treatment for men and women. Both on statutory and administrative committees, the college regards gender balance as an important consideration and strongly prefers to form committees equally represented.

Women's interests are specifically represented by the women's cell convener who is a faculty of the college. An annual gender sensitization plan is prepared to promote gender equality in our institution. A store for female staff and students named " She Care " is functioning on the campus. Some of the steps taken to promote gender equality in our institution are :

- Establish good gender balance in decision-making and promotes a culture of respect in all activities
- Ensures equality of access to all services provided by the College by conducting seminars, workshops, etc.
- Encourages women faculty to be Conveners in most of the administrative committees formed every year
- Female students with strong leadership qualities are representative of the student council.
- The college encourages equal participation opportunities in Co-Curricular and Extra-curricular activities
- Training and Placements, as well as entrepreneurship opportunities, are provided without any discrimination.
- The female staff is given maternity leave and benefits.

No. of activities conducted according to the gender sensitization action plan :

Year

2020-2021

Number

3

Specific facilities provided for women in terms of:

a. Safety and security

b. Counseling

c. Common Rooms

d. Daycare center for young children

e. Any other relevant information

Response:

a. Safety and Security :

The various safety and Security facilities provided are :

- Student Grievance Redress Cell, Anti-ragging Committee, and Women Grievance Cell is functioning on campus
- The college campus is well secured with compound walls with main and service gates guarded by trained security guards for 24 hours
- Two lady security personnel is available in the girl's hostel
- Separate hostel facility for boys and girls
- On-campus medical consultation by a General Physician
- Hygienic food in the Canteen
- Student's Industrial visits are accompanied by male and female faculty
- SMS to all the parents to ensure the presence of their ward
- Identity card mandatory
- Safest transport facilities for both day scholars and hostellers
- Separate seating arrangement for girls in the bus, classrooms and dining hall
- Surveillance CCTV cameras
- Fire extinguishers and First Aid Box
- Lift facility
- Incinerator
- UV treated Water

b. Counseling

Professionally qualified three counselors are available to help the students to identify and understand their problems and to resolve them. Separate counseling rooms are provided. Counselors meet every student and in case of any special issues, follow-up is also recorded. Counseling services on academic and non-academic matters are also available. All these services are offered to them free of cost.

- **Advisor Support:** The college also has a mentorship program manned by faculty advisors who are allotted up to 20 students for parental care, control and guidance. Advisors provide guidance and arrange remedial measures for slow learners.
- **Career Counseling:** Training & Placement center provides career counseling services such as a career questionnaire to check the career goal of each student, arranging seminars and invited talks to guide them on viable career options and exploring higher Studies options.

c) **Common Room:** There are separate common rooms for females and males with all amenities to take rest if they are sick or need any medical attention. First aid facilities along with medical care are provided in the institution.

No. of Rest Rooms

Girls - 5, Boys - 2

Incinerators

4

No. of Security Personnel

Male- 9, Female - 2 (Ladies Hostel)

No. of Counseling rooms

2

No. of Medical room

1

Annual gender sensitization action plan Sahrdaya College of Engineering & Technology, Kodakara Action Plan by Internal Complaints Committee (Women Grievance Cell) 2020-2021 No. Action Further Details Responsibility Start Date End Date 1 Yoga practice for 1st-year students Weekly one hour by Sr.Ancy ICC-Women cell 8/1/2020 3/1/2021 2 Debate -Dowry system Study group activity from 1 pm to 2 pm ICC-Women cell 10/8/2020 10/8/2020 3 Workshop on value-added products Workshop on value-added products for girls and female staff ICC-Women cell 11/7/2020 11/7/2020 4 Quiz-Human Rights Quiz in

connection with Human Rights Day for 2019 and 2020 batch interested students ICC-Women cell 12/10/2020 12/10/2020 5 Webinar on 'Safety of women in Society' Webinar on 'Safety of women in Society' ICC-Women cell 4/28/2021 4/28/2021

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

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment

A. 4 or All of the above

File Description	Documents
Geo tagged Photographs	View File
Any other relevant information	No File Uploaded

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

Solid waste management: The disposal of solid waste is carried out on the campus in a systematic manner. The collection points are provided in various locations on the campus. From the collection source itself, the waste materials are segregated by providing separate bins for paper waste, glass & bottle waste and food waste. Paper waste is collected and burned by means of an incinerator provided near the campus. Food waste from the campus is collected for feeding on the dairy farm. Other wastes such as glass and bottles are collected by the agencies on a regular basis.

Liquid Waste Management: For the effective management of liquid waste, a wastewater treatment plant of capacity 2.5 lakh liters /day is functioning on the campus. The wastewater from the kitchen, washbasin and laundry is collected and supplied to the treatment plant. The collected water is subjected to aeration, and filtration using Activated Carbon Filter (ACF) and Pressure Sand Filter (PSF) to remove the organic matter. After treatment, the water is used for irrigation purposes to maintain a green campus.

E-waste management: The damaged computer hardware is stored in a separate location on the campus. On a periodic basis, the damaged parts are taken by external agencies for suitable recycling. The other waste materials such as unused CD and pen drives are also taken away as scrap material. An MoU with an agency named "Aspire Greens" is signed for collecting the e-waste materials from our campus. Also, most electronic devices contain a variety of materials, including metals that can be recovered for future uses, are dismantled and reused.

Waste Recycling: The food waste is collected by means of composting and it is converted to manure. The manure is further used for the plants in the garden. This means the food waste is being utilized in an environmentally friendly method.

Chemical Waste: Hazardous chemical wastes are filtered through charcoal filters or chemical deactivation is done before disposal. Prior to the disposal of the non-hazardous solution, the fluorescence is checked to ensure complete removal. Treatment is conducted within 10 calendar days of accumulation.

Biomedical and Biotechnology Waste: Disposal of Microbial Culture: The contents are drained from the flasks/tubes/pipettes/Petri plates into the sink under running tap water. The media is autoclaved in flasks/tubes/pipettes/Petri plates at 121 degrees Celsius for 30 minutes at 15 lbs pressure. The caps or stoppers on the containers should be loosened before autoclaving.

Precautions for safe removal of agarose Gel: Ethidium Bromide-containing gels are collected separately, usually in a sealable disposable plastic container such as a bucket with a lid. A dilute solution containing Ethidium Bromide (<0.5 mg/mL), like gel buffer used when running DNA gels is deactivated using charcoal filtration or chemical deactivation. We filter the ethidium-containing buffer through the charcoal filter and then pour the filtrate down the drain. The charcoal filter is then placed in a sealed zip lock bag and disposed of with the ethidium gels as hazardous waste.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	View File
Geo tagged photographs of the facilities	View File

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus **A. Any 4 or all of the above**

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Any other relevant information	No File Uploaded

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows: **A. Any 4 or All of the above**

1. Restricted entry of automobiles
2. Use of bicycles/ Battery-powered vehicles
3. Pedestrian-friendly pathways
4. Ban on use of plastic
5. Landscaping

File Description	Documents
Geo tagged photos / videos of the facilities	View File
Various policy documents / decisions circulated for implementation	View File
Any other relevant documents	No File Uploaded

7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institutional environment and **A. Any 4 or all of the above**

energy initiatives are confirmed through the following
1.Green audit 2. Energy audit
3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

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

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment
Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

A. Any 4 or all of the above

5.

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Policy documents and information brochures on the support to be provided	View File
Details of the Software procured for providing the assistance	View File
Any other relevant information	No File Uploaded

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 200 words).

This institution is an amalgam of students coming from diverse social, economic, religious, and gender groups to realize diversity and inclusion in all spheres of campus life. Our attempt is for unrestricted

diversity, open-to-all inclusiveness to infuse more and more of diversity into the recruitments, admissions, curricular, co-curricular activities, administrative structures, and practices, without compromising on quality and excellence.

Diverse learning, a high priority on our campus, is another addendum. The component refers to sensitivity to differences, including race, gender, status, ethnicity, religion, sexual orientation, and disability. Most of our students, in fact, are in need of a diversity course as they are not adequately tuned to an inclusive society. Our institution takes special care to organize training, campus discussions, activities, sessions, and co-curricular and extra-curricular programs on the above aspects with necessary facilities.

Ever since the inception of our institution, the Extension, and Social Outreach Programs have been given equal importance as academics.

- Reaching out to the larger sections of the neighborhood population, especially to the deprived groups, for the purpose of equalization of educational opportunities.
- Address to the public through seminars, roadshows, home visits and Flash mob relating to the environment, electricity-saving methods, health education and issues on drugs, nutrition, sanitation, gender issues with stress on gender equity, human rights education, communal harmony, and cultural integration, self-employment generation and use of technology appropriate to the society.

Community-based extension educators such as councilors or members of grama panchayaths communicate local issues and problems to campus-based extension faculty. Together, they conduct a community-based inquiry in order to design educational programs that address local needs. The following kinds of community extension activities are usually undertaken by the campus community:

- Home for the homeless projects
- Orientation webinars on "Covid 19" to the society
- Sanitizers are prepared on campus and given to the public

- Free engineering assistance to the poor in the locality to improve their quality of life
- Visiting the houses of the aged, disabled and differently-abled
- Visiting the houses of gramma panchayath for giving awareness on computer literacy, electricity consumption audit
- Free water pollution testing facilities for local people
- Rallies and awareness programs on drug abuse, alcoholism, environment conservation, and corruption
- Raising funds to enhance facilities in the public utility establishments such as
 - Flood-affected people
 - Helping parents who are financially poor with medical treatments
 - Donation of a bus to the nearby LP school
 - Installation of a biogas plant in another school
 - Computer literacy in rural schools
 - Water purifier installation in an aided Govt. school
 - Helping orphanages by providing daily needs

We believe in transforming the college into an active instrument for social change through extension activities. The college provides an opportunity in approaching and arranging expert talks by experts from different technology domains. Events such as sports and cultural activities are arranged on the premises of the college itself. Even though the college is located in a rural area, we could get eminent personalities from the fields of engineering, business, media, entertainment, art, music, science & technology, NGOs, entrepreneurs are invited for TED talk events

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View File
Any other relevant information	No File Uploaded

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

Various programs are organized in a serene and healthy atmosphere for the overall development of the students for the promotion of universal values. Through these programs, they develop harmony among themselves which are wide in geographical and cultural differences. We fine-tune their talents, help them to face the

challenges to be good human beings and mold the future citizens of our country.

The institution also ensures that the students are provided with excellent student services such as co-curricular, extra-curricular activities, hostel facilities, financial support and career guidance support. Linkage and industry interface are the various other forms of student services the management offers in order to maintain the quality of the programs.

College Programs such as College Day, Environmental Day, Engineers Day, Sports Day, Student Council inauguration, Academic year inauguration, NSS Activities, First-year induction and inauguration program, a send-off to their seniors, Alumni get-together and many such activities are coordinated by our students. We also recognize our students by appreciating and honoring them by giving a silver ring for their course completion and a Diamond Ring to the Best Student of the Year. Students participate in various contests and competitions, Tech-Fests, and also we provide ample opportunities to win prizes. The co-curricular student activities promoted in this institution aim at student competencies such as leadership skills and life skills. The Arts, Sports, NSS Club activates students interested to imbibe values and make them responsible citizens.

The management recognizes every individual as well as collective skills of the employees in the development of its educational goals to put considerable weight on merit, values, commitment and ability of the faculty. This institution is committed to providing a quality learning experience for all our students by continuously improving and updating the quality of all aspects of its services. It seeks to cater to the changing and challenging needs of the society and industry by

- Richly contributing to the academic standing and overall knowledge development of the students.
- Maintaining state-of-the-art infrastructure and a congenial learning environment.
- Regularly enhancing student's competence and urging them to adopt the most modern and innovative methods and tools of learning
- Inculcating moral and ethical values among students and staff
- Promoting research and development programs for the growth of the nation's economy
- Disseminating technical knowledge to the community around through extension programs
- Provide the students with add-on courses and internship

opportunities that help in their career progression

- Introducing rigorous, continuous and consistent assessment procedures, to meet the standards of the Industry

The violation of the privileges of the students is informed through awareness sessions conducted by various cells formed at an institutional level such as anti-ragging and anti-drugs, women's cell and if any complaints reported will be addressed by the grievance cell. All students also have the opportunity for student satisfaction surveys at required intervals during their program. This feedback from the students will be considered for making necessary changes in the programs. Also, awareness sessions are conducted as part of the observance of vigilance week, Swatch Bharat, and yoga.

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

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

A. All of the above

File Description	Documents
Code of ethics policy document	View File
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 File
Any other relevant information	View File

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The college organizes special programs every year on the occasion of the birth or death anniversaries of great Indian personalities as well as celebrates state festivals such as Onam and Kerala Piravi. Our students are on a mission towards a better India by breaking the boundaries of religion and caste. Thoughts of great Indian personalities are sowed into the young minds through the exhibitions and

programs conducted these days. Staff and students get to know the importance of national integrity in the country in general and their roles in particular.

- 26th January Republic Day- On this day, various formal events including flag-hoisting and marchpast are organized and followed by a "constitution awareness program" in which students and staff members get information about their duties towards our nation and the rights given to them by our constitution. By organizing such types of events, the college does its share to instill patriotism and awareness in the next generation.
- 28th February National Science Day: Programs are conducted to develop curiosity towardsscience.
- 15th August Independence day- It is an event marked with the flag hoisting by the Principal/Executive Director and well-practiced march-past by many teams of students. Cultural activities related to the independence movement are exhibited.
- 5th September Teacher's Day (Dr.Sarvpalli RadhaKrishnan Birth Anniversary)- We celebrate Dr. Radhakrishnan's birthday as Teacher's Day with great fervor by organizing programs for the teachers.
- 15th September Engineers day (Birth Anniversary of Sir Visvesvaraya) - We celebrate this day on 15th September consistently as an exceptional tribute to the best Indian Engineer Bharat Ratna Mokshagundam Visvesvaraya.
- 27th July - Death anniversary of Dr. A P J Abdul Kalam - We remember this day consistently as an exceptional tribute to the best Indian scientist, President, and mentor and he is remembered for his contributions to the country in many roles.
- 29-August - National Sports Day (Birth anniversary of hockey legend Major Dhyan Chand): A walkathon was conducted by the

Sports team.

- 02nd Oct - Gandhi Jayanthi: Govt. of India is Commemorating the 150th Birth Anniversary of Mahatma Gandhi both at the National and International Level to propagate his message and

contribution made in nation-building. To make this movement really successful and effective, our institution organized an essay writing on the thought of Mahatma Gandhi "Be the change you wish to see in the world".

- Onam: Initiated by the Students Council members, many programs are planned for staff, housekeeping and for students. All participate with full enthusiasm without any caste or status discrimination. Onam Sadya is given to all members of our college.
- Kerala Piravi: A message by a faculty is given in the Morning Assembly. Also, students conduct cultural activities to celebrate state festivals. All can wear the traditional color dress these days.

During the Study group activity, poster making, group discussion and essay writing are conducted to remember the death anniversaries of great Indian personalities. These National festivals are celebrated to make the students aware of their contribution to the nation

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	View File
Geo tagged photographs of some of the events	View File
Any other relevant information	View File

7.2 - Best Practices

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

Best Practice-1

1. Title of the Practice: Project-based Learning

2. Objectives of the Practice :

To encourage the students to have the experience of applying the

theory they have learned into projects, thereby making them industry deployable and also creating an interest in entrepreneurship.

Students also get interested to undergo industrial training and internships. This also gives motivation to students to do additional practicals through virtual labs. Students also learn to work in groups and share ideas.

Sponsored Labs / Industry perspective projects are set up in collaboration with Industry to execute the latest projects and enable students to experience the latest software and equipment.

This method provides detailed learning to students and also reduces them to initiate a project on the basis of what they have learned in the classroom.

The results show how the methodology provides three main advantages:

- (1) It facilitates training in technical, personal, and contextual competencies;
- (2) Real problems in the professional sphere are dealt with;
- (3) Collaborative learning is facilitated through the integration of teaching and research.

3. The Context :

Sahrdaya is a well-established institution with a marvelous track record of great achievements in academic fields and in presenting and securing innumerable prize-winning student projects at the National and State levels, establishing itself in engineering education for the last 17 years.

Very unique to Sahrdaya College, we have created an Innovation friendly eco-system on this campus which is instrumental for our students in securing many international and national level prizes first and second, in very highly reputed competitions through which the students have proven their mettle, skills and competency in engineering and allied areas.

4. The Practice :

More practical training and application skills for engineering students are the need of the day. Industries, in general, are complaining about the lack of practical training and teamwork in

fresh engineering graduates.

More entrepreneurs are also the need of the day to fulfill the dream of our Honorable Prime Minister " Make in India".

In this context, project-based learning will enhance the application skills of engineering students. Therefore Student Projects are highly relevant as they help students to acquire requisite skills that they need to demonstrate after the completion of their graduation.

We focus on project-based learning of students from the early stage of Engineering education. Starting from semester-1, Sahrdaya College of Engineering & Technology provides academic rigor to reach up to industry-driven projects. The students involved in projects perform better on various platforms such as academic, competition and industry suitability. It has been found that the students sincerely engaged in projects performed exceptionally well at the national and international levels which made Sahrdaya College of Engineering & Technology in the top institute for engineering in Kerala. In the minor project, student works on projects of their interest while in a major project the students are expected to work on projects with respect to industry expectation for 4-6 months. These projects make the student industry deployable.

Project-based learning encourages student competencies to go beyond subject knowledge, prepare and challenge the student to direct their own learning, solve problems of academic significance and explore beyond the classroom. Therefore Student Projects at the college Level are highly relevant as they help students to acquire requisite skills that they need to demonstrate after the completion of their graduation.

5. Evidence of Success :

Sahrdaya insists all the students do projects every semester starting from the first semester, in addition to the mandatory curriculum insisted on projects.

Students do the projects in groups under the guidance of faculty members applying the theory they have learned. Project exhibitions are organized in every semester, and the best projects are given cash prizes at the end of every semester. The entire staff and students visit the project exhibition and give creative suggestions for improvement.

The students are encouraged to participate in all state and national level project competitions. The winners are honored in the general gathering of staff and students.

Students are also encouraged to submit their projects for funding from different agencies, and many student projects are getting funding and grants. The talented and interested students are given hands-on training in Industry sponsored training centers on the campus and by external sources.

Additional Skill development certification courses are also offered to the students for improving their technical and soft skills. We also encourage students to do additional practicals beyond the syllabus through virtual labs.

A Project Policy handbook is in practice for proper guidance and supports Project-based learning

The Innovation & Entrepreneurship Development Center (IEDC) and Startup Boot camp of Sahrdaya encourage young entrepreneurs and innovators with their ideas, incubate and fund their products establishing them into professionals.

Few to mention, Biomedical students are back from the Rashtrapathi Bhavan with the national honor of Gandhian Young Technological Innovation Award of Rupees 15 lakh for its humanitarian invention of a high-tech fully automated sanitary bed for the totally crippled and bed-ridden, Computer Science students were the winners of IBS Travel Hackathon 2018 and were awarded Rs.60,000 and also the Biotechnology PG students won Rs.1,00,000 in the Dr. Pradeep P Thevannoor Innovation Awards 2018, Techtop National Innovation Contest, Malayalam Manorama Yuva Contest, Srishti and many more in National and International level.

To support our team, the institution has come forward with training centers by industry on our campus. GE Healthcare Training center, Sahrdaya - Accenture Innovation Lab and Knowledge & Research Center, IoT Lab.

Recently Kerala Startup Mission (KSUM) sanctioned an amount of 16.61 Lakh as an Idea Fund for 15 Projects and a few ideas selected for industrial mentoring and laboratory support.

Sahrdaya holds Kerala Startup Mission (KSUM)'s "Exemplary Performance Award" for Innovation and Entrepreneurship Development

Activities" from the Chief Minister of Kerala. In November 2018, Sahrdaya was awarded the "Entrepreneurship Enabler Award 2018" from the Electronics and IT Secretary of Govt. of Kerala for the institute's contribution towards the Entrepreneurial Ecosystem system creation in Kerala State.

6. Problems Encountered and Resources Required

All students may not get the opportunity to work on industry-specific projects and get hands-on training. Students' chances to experience the latest technologies and equipment are minimum as industry readiness is limited.

For any innovation to take the product shape, there is a need for the availability of resources and facilities. Our institute has taken an effort to start incubation centers in a separate building named " Knowledge Center". It has access to the large library on two floors. Also, discussion rooms, interview cabins, seminar halls, and video conferencing facility is available in the same building.

It is therefore envisaged that the students will get together to utilize the facilities provided to interact with industry and explore creating innovative projects and implement them into a product for societal needs.

Best Practice-2

1. Title of the Practice: Implementation of Outcome-Based Education

2. Objectives of the Practice: Our institution takes the effort to ensure graduating engineers from all programs demonstrate expected knowledge, skills and attitude leading them to enhance their employability skills and meet the global demands in technology. The college follows an outcome base education by developing course plans with objectives and Program Outcomes(PO) as defined by NBA. The curriculum gaps are plugged through projects, additional labs, add-on courses, industry connect, etc. other than the curriculum and evaluated systematically through different assessment tools. All activities on campus (academic, activities beyond the curriculum, co-curricular and extra-curricular) were focused on developing the POs leading to effective implementation of Outcomes-Based Education (OBE), as it would then lead to global recognition of our graduates and to have a strong role in the society.

3. The Context:

Global demand for qualified and qualitative engineering human resources is increasing day by day and the learning process has become dynamic in the current century. A technically strong knowledge-based society is very much needed for a fast developing nation like India.

To meet the challenges and demands of the present and future it is the need of the hour to groom the engineering students to meet the demand and expectations of the country and world. Keeping this in mind and following the norms of the NBA our institution is practicing the best teaching and learning methods on the campus such that the outgoing students from the institute is a global asset and proven professional to contribute their best for the Nation-building by availing all the resources and facilities for their capacity building.

A need to define, develop, implement and measure student learning through the attainment of various outcomes: Course Outcomes (COs), Program Outcomes (POs) and Program Specific Outcomes (PSOs). The institution gives importance to technical and non-technical activities in the overall development of our students. With a need to implement OBE, every association of the student is defined and measured as mentioned below:

- Academics is direct through Continuous Assessment tests (CAT), Project-based Learning, Assignments, Seminars, University Exams Quizzes and indirectly through a feedback system from all stakeholders
- Activities beyond curriculum like co-curricular and extra-curricular activities. The campus witnesses the University Level Techfest, National IEDC Summit, Sahrdaya Tedx, and MoUs with notable companies leading to further development and measurement of the student competencies.

4. The Practice :

This initiative by the Institution lead to innovations in the classroom by teachers in the delivery methods, innovation by faculty in assessment tools and hence, contributing to the overall development of the student learning, with conscious efforts in developing the expected program outcomes defined by NBA, and hence ensuring our graduates have global recognition. Learning outcomes are statements specifying what learners will know or be able to do as a result of a learning activity. Describe the desired condition -the knowledge, skills or attitudes required to fulfill a need.

The question papers of each course are prepared in such a way that it maps to the course outcomes of the respective subject and six levels of learning - remember, understand, apply, analyze, evaluate and create as per Bloom's Taxonomy. For a better teaching-learning process evaluation, it is always preferred to adopt a method to evaluate the quality of the question paper a teacher has set. The output of a good quality question paper identifies, how many of our students have understood the concepts we have taught and also how well they are able to apply them. The process of question paper quality checking is implemented in the academic year 2020-2021. The details are attached. The continuous assessment of the students is carried out by calculating the marks of students in internal exams and assignments. After each internal exam faculty of each course is publishing the result analysis and it is being compared with that of the previous exam. Based on that concerned faculty is supposed to submit the action plan to take. This improved competency of the students resulted in enhanced student performance both when on campus and after graduation as our alumni.

We would like to add that this journey of embracing OBE was a collective effort by all stakeholders, both direct and indirect. The initial learning was from the series of training programs conducted by the NBA. This was then followed by a series of brainstorming sessions to comprehend and implement the processes of OBE. The academic leaders were able to perform with unconditional support from management.

The institute is having well-qualified faculty and state-of-the-art workshops and engineering laboratories to impart the best teaching. The faculty are trained to carry our Outcome-based Education (OBE) based teaching methodology where conducive teaching-learning practices were implemented.

The lectures are designed to provide more interactive sessions of learning with 50% blackboard teaching, 25% Powerpoint, 15% student interactive method and 10% assignments. All the faculty members are encouraged to appear for online certification courses in their respective teaching subjects conducted by NPTEL and Pedagogy principles in OBE based education system. Institute is one of the best NPTEL local chapters in the state.

To conclude, there were no constraints or hurdles in this path of adopting OBE. In addition, all academic leaders have willingly shared this journey and learning experience on various platforms, to help other institutions of higher education to grow and contribute to the progress of the nation. Few are listed below:

- Students will understand what is expected of them and teachers will know what they need to teach during the course.
- OBE does not specify a specific method of instruction, leaving instructors free to teach their students using any method. Instructors will also be able to recognize diversity among students by using various teaching and assessment techniques during their classes.
- Student involvement in the classroom is a key part of OBE. Students are expected to do their own learning so that they gain a full understanding of the material. Increased student involvement allows students to feel responsible for their own learning, and they should learn more through this individual learning.
- Lecture Notes are preferred over the subject materials and students are encouraged to use the library for reference to corresponding subjects.
- Study Group Activities are conducted where students have role-based tasks, Quizzes and other opportunities to explore their passion.

5. Evidence of Success

Focused efforts by faculty in truly embracing OBE, happened through small innovations in the teaching-learning process, innovations in assessment tools and ensuring that every student has the expected knowledge, skills and attitude. Faculty contribution towards successful implementation of OBE is reflected in enhanced student performance.

A few parameters that are considered as evidence towards successful implementation of OBE through faculty contribution are:

Enhanced quality of projects, Enhanced number of students attending online courses, Enhanced professional body activities, Enhanced number of awards secured by students in National and International project competitions, activities Improved performance in cultural and sports contests held in-campus and outside campus, Enhanced on-campus placements, Enhanced off-campus placements, Improvement in the average and highest pay package offered, Marginal improvement in a number of successful entrepreneurs.

The above evidence of improvement in student performance can be attributed purely to faculty contribution ineffective implementation of OBE.

This effective implementation of OBE, leading to improved student

performance through faculty contribution eventually resulted in 80% Placements for 2018 & 2019 pass outs, students getting GATE Qualified, Project grants, students getting admitted to premier institutions for higher studies, becoming entrepreneurs and the results also have proved that the effectiveness of this method.

6. Problems Encountered and Resources Required

Problems Encountered

The outcome-based education identifies the gaps in the attainment of course outcomes through feedback from different stakeholders. One of the major concerns is that feedback data is related to conducting Add-on courses related to each course. However, as per the present curriculum, the time period for the provision of Add-on courses are very much limited. Also, the familiarization with practices in the industry is identified as another important parameter for attaining the course outcome. Hence adequate time shall be allocated in the curriculum to address these requirements for the effective implementation of outcome-based education.

Apart from this, another problem encountered is the computation of attainment of course outcome based on the End semester results. The end semester results presently represent the cumulative marks from Continuous Internal Evaluation and the End Semester examination. Based on this calculation of attainment of individual course outcomes it becomes unclear. Hence there shall be an enhanced methodology specified in the curriculum supporting the outcome-based education, which also helps in proper quantification of attainment of course outcomes.

Project Policy

Question Paper Quality

File Description	Documents
Best practices in the Institutional website	Nil
Any other relevant information	Nil

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

VISION CENTERED ACTIVITIES

Our institution's social responsibility is driven by the process of defining and measuring "outcomes" as well as "core values" which relate results to the purpose and its administration is largely the act of effectively balancing social accountability to the dynamics of the marketplace.

The following Vision and Mission statements of the institution articulate the cornerstones that direct to shape all the commitments and undertakings of this institution.

Vision :

Evolve as a leading technology institute to create high-caliber leaders and innovators of global standing with strong ethical values to serve the industry and society.

Mission :

Provide quality technical education that transforms students to be knowledgeable, skilled, innovative and entrepreneurial professionals.

Collaborate with academia and industry around the globe, to strengthen the education and research ecosystem.

Practice and promote high standards of professional ethics, good discipline, high integrity and social accountability with a passion for holistic excellence.

The vision provides us the ultimate institutional direction and the mission, clarity of understanding regarding institutional definition. We have revised our Vision and Mission in September 2019 without changing its focus.

Institutional Core Values :

- Unending pursuit of excellence
- Unrestricted diversity and open-to-all inclusiveness
- Uncompromising transparency in all functional domains
- Total commitment to social responsibility and ethical values
- Integration of knowledge and work

- Urge for research and innovation

The Vision and Mission statements define the institution's distinctive characteristics :

Qualitatively upgraded education and personality enhancement programs prepare young engineering students to grab opportunities at a global level. Sahrdayans will be ideally brought up as citizens, the nation can rely on to fulfill its hopes and aspirations.

Imparting quality, and technical education, Sahrdayans have been accepted in the worldwide work environment, and this is a vision to be realized in the coming years.

With functionally useful, socially responsible and morally uplifting education as its core agenda, the students are prepared to meet the tough demands that contemporary society produces. The founders have envisaged the vision of providing a skilled and competent workforce to society by imparting quality education and apt training.

Some of the measures envisaged are:

The institution especially emphasizes especially on Outcome Based Education and Project-based Learning with well-equipped laboratories and infrastructure. Our college established various Institutional mechanisms such as IEDC, RDC and STBI to foster the growth of research, innovation, and entrepreneurship. This catalyzed the growth of techno-entrepreneurial culture and the campus has evolved as a hub of such activities; IEDC Summit 2019 for aspiring entrepreneurs hosted in our college, University-sponsored Tech-Fest, Tech-Top National Project Competitions, "Hack 4 People" Hackathon and TEDxSahrdayaCET are hosted in our college.

The institution has good campus placements. Special focus is given to bridging the gap between Industry and Academia through Industry Institution Interaction. It has nurtured and produced a plethora of famous alumni who have a positive impact on society through their contribution to the country and to the development activities of the Institution.

This College is fully committed to the mission of training the youth in technology for the workplace at global standards with the professed intention of changing the destiny of the nation for the better and competing successfully in the shifting global job market. This industry blend at the college has helped our graduates to perform well in the industry and many could reach senior leadership

positions at various MNCs and corporate houses.

Many of our students have qualified in competitive exams and are working in Central and Govt. sectors. Also, pursuing higher studies such as Ph.D., M.Tech and MBA in premier institutions and from recognized high ranking foreign universities. We have MoU's signed with reputed organizations and also with the premier institution in Wilmington University, USA. Some students have become entrepreneurs and established their own companies across the globe.

SCET is collaborated with a number of organizations and established a few collaborative centers of excellence such as GE Healthcare Training center, Accenture Innovation Lab, Agappe Training center, Research Center and IoT Lab for innovation, to inculcate industry-ready skills among the graduates. The campus facilities are continuously augmented and strengthened. Innovative Centres of Excellence/incubation Centres and cutting-edge laboratories give the required industry blend to the students.

A variety of teaching and learning techniques are employed to impart knowledge and skills to students. The Institution has put effort into encouraging innovation in Teaching and Learning processes.

The strength of the institution is well-qualified, experienced, dedicated faculty and staff members with an excellent educational background. A special focus on promoting R&D for the faculty and students is initiated. A faculty research seed grant is given every year and the student's publications in Journals are encouraged to boost their morale. For upgrading faculty skills, the institution encourages research, seminars, conferences, and faculty development programs. Publication of articles and membership in professional bodies is encouraged by the management. This has resulted in a good number of publications and few are now Research guides.

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

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

Sahrdaya College of Engineering and Technology is affiliated to APJ Abdul Kalam Technological University, Kerala and follows the university designed curriculum. The university prepares an academic calendar that specifies the duration of the semester, date of commencement and end examination dates. The institution has diverse mechanisms for the effective delivery of the curriculum.

Effective curriculum delivery is ensured through the following procedure:

- **Academic Calendar:** Based on the university academic calendar, the Principal and calendar in charge prepare a detailed academic calendar which includes dates of Continuous Assessment Tests (CAT), assignment submissions, extracurricular activities, association activities It is then approved in the HOD meetings and thereby published in all notice boards and college website.
- **Department Staff Meeting:** Department wise staff meetings are conducted at least once a month. Decisions in the HOD meeting are conveyed to the faculty members. Action plans are formulated by incorporating the feedback from faculty members.
- **HOD Meeting:** Administrators & HODs meet once in a month and discuss the action plans to arrive at an optimal way of implementation of curriculum delivery.
- **Course Plan:** Before the commencement of each semester a course plan is prepared for every course by the respective faculty and is approved by the HOD and Program Coordinator.
- **Course File:** Faculty members maintain a course file for all courses including laboratory courses which contain :
- **Course Diary** containing course plan, subject coverage,

academic calendar, students' attendance & result analysis

- Mapping of Course Outcomes (COs) with Programme Outcomes (POs) & Program Specific Outcomes (PSOs)
- Tutorial / Assignment Questions and samples.
- Scheme of Evaluation for Internal Exams
- Sample Answer Sheets of Internal Exams University Question Papers along with Scheme of Evaluation & Answer Key
- Course Committee Meeting / Class Committee Meeting: Periodic Course /Class Committee Meeting with student representatives is conducted for the effective implementation of the course plan. Suggestions from students are also considered.
- Result Analysis: Proper evaluation of internal exams & university exams, tutorials & assignments are done by faculty members and are reviewed by the HODs and Principal.
- Remedial Classes: Remedial classes are arranged for slow learners who show poor performance in Continuous Assessment Tests.
- Progress Report: Progress reports of each student including attendance, internal exam marks, and university results are made available for parents and students in Linways software.
- PTWA Meeting: PTWA meetings are conducted each semester and students' progress reports are distributed to parents. Feedback from parents is collected and considered for the calculation of CO attainment and overall improvement.
- Practical Courses: Laboratory manual is prepared for all the experiments and is given to students. Course plans and course files are maintained for each lab.
- Feedback System: Timely feedback is obtained from the stakeholders and is analyzed and corrective actions are taken.
- Management: Executive Director meets Director, Joint

Director, Principal, HODs, Teaching and Non-Teaching staff once in a month and gives guidance.

- **Course Exit Survey:** To assess the effectiveness of curriculum delivery, a course end survey is being conducted for all the courses and feedback is considered for further improvements.

File Description	Documents
Upload relevant supporting document	View File
Link for Additional information	https://sahrdaya.ac.in/wp-content/uploads/2022/04/1.1.1-Additional-information.pdf

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

Sahrdaya College of Engineering and Technology strictly follows the academic calendar released by APJ Abdul Kalam Technological University for both the even and odd semesters. The college has a special team of faculty headed by a convenor, who shall arrange college events in line with the dates mentioned by the university. The Academic Calendar includes details regarding the conduct of Continuous Assessment Tests (CAT), submission of assignments, university exam schedule, arts and sports day and also regarding the details about fee payment. APJ Abdul Kalam Technological University conducts auditing in every department at least twice in an academic year and an academic report will be sent to the principal. Sahrdaya College of Engineering and Technology is graded Excellent / Very Good in the assessment Criteria key aspect which deals with Compliance to the Academic Calendar of University.

Academic Audit Report by University

Key Aspect

Rating given

2020-2021

Compliance to the Academic Calendar of University

Very Good

The Continuous Internal Evaluation is ensured through the following procedure:

- **Academic Calendar:** Based on the university academic calendar, the college has a special team of faculty headed by a convenor, who shall arrange college events in line with the dates mentioned by the university. It is then published on all notice boards and college website.
- **IQAC:** The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance; which would channelize all efforts and measures of the institution towards promoting its holistic academic excellence.
- **Continuous Assessment Tests (CAT) & Assignments:**
- **Continuous Assessment Tests (CAT) and assignment questions** are prepared based on CO's.
- **Two Continuous Assessment Tests & two assignments** are conducted for every course.
- **Department wise scrutiny committee** is to scrutinize each question paper set by the department faculty members to ensure the quality of questions as per the University standards and give required suggestions/approval.
- **Tutorials:** Tutorials are conducted regularly and effectively as per the curriculum.
- **Evaluation of students performance in practical classes:** The lab record is evaluated on the same day and viva is conducted on each lab class
- **Result Analysis:** Proper evaluation of internal exams & university exams, tutorials & assignments are done by faculty members and are reviewed by the HODs and Principal
- **Assessment of Outcomes:**

- Internal and assignment question papers mention COs and knowledge levels.
- Appropriate tools are used for CO/PO assessment.
- Targets are fixed & calculate CO/PO attainment.
- Progress Report: Progress report of each student which shows the academic performance including attendance is available in Linways software.
- Feedback System: Timely feedback is taken from the stakeholders & it is analyzed and action taken.

File Description	Documents
Upload relevant supporting document	View File
Link for Additional information	https://sahrdaya.ac.in/college-calendar/

1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University

A. All of the above

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	View File
Any additional information	View File

1.2 - Academic Flexibility

1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented**1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented**

11

File Description	Documents
Any additional information	View File
Minutes of relevant Academic Council/ BOS meetings	View File
Institutional data in prescribed format (Data Template)	View File

1.2.2 - Number of Add on /Certificate programs offered during the year**1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)**

6

File Description	Documents
Any additional information	View File
Brochure or any other document relating to Add on /Certificate programs	View File
List of Add on /Certificate programs (Data Template)	View File

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

1229

File Description	Documents
Any additional information	View File
Details of the students enrolled in Subjects related to certificate/Add-on programs	View File

1.3 - Curriculum Enrichment

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

The curriculum includes various courses that address Environment, concern for the environment, awareness of hazards for the environment. For example, the first year B.TECH program includes an institute core course on "Sustainable Engineering" (based on the AICTE mandatory guideline). In addition to the above institute core courses, individual programs have included additional courses to address Environment and Sustainability. For example: 'Environmental Biotechnology' 'Sustainable Energy Processes' by Biotechnology; 'Environmental Impact Assessment' and 'Solid Waste Management', 'Environmental Engineering' by Civil Engg. The curriculum of PG programs also includes courses to address Environment and Sustainability.

Courses to address Human Values and Professional Ethics: The curriculum includes various courses to address Professional Ethics and Human Values. The curriculum also includes course on 'Personality Development and Communication' to develop human values and communication skills. In addition to the above institution core course, individual programs have included additional courses to address Professional Ethics and Human Values. 'Life Skills', 'Principles of Management' are some among them which deal with ethics. The curriculum of PG programs also includes courses to address Human Values and Professional Ethics. In the present curricular structure, specific courses to address gender are not included. However, the campus ambience, the work culture provides opportunities for students to demonstrate professional behaviour. The Women Cell and the Anti-sexual harassment committee continuously offer various programs like Debate, seminar, panel discussions on gender sensitization. The impact of these programs is evident through the confidence portrayed by all students irrespective of their gender.

- GENDER

Women grievance cell:

- Women grievance cell plays an active role in empowering girl students.
- Women grievance cell was formulated in the college according to the Sexual Harassment of Women at Workplace (prevention, prohibition & redressal) Act, 2013.
- Women Grievance cell jointly with the student welfare

committee of college had organised a one hour workshop session on "Value added products" by M/S.Urmila N.Pai -Trainer from the Pidilite group.

- International Women's day is celebrated every year.
- ENVIRONMENT AND SUSTAINABILITY

The curriculum includes various courses that address Environment, concern for the environment, awareness of hazards for the environment & Sustainability.

Sl. No.

Course

Description

1

Environmental Biotechnology S7 BT Core

To introduce scientific aspects of biochemical and cellular processes in the removal of environmental pollutants.

2

Sustainable Energy Processes S8 Global Elective

To introduce the current and potential future energy systems in a sustainable manner.

3

Environmental Engineering S7 BT Core

To introduce science and engineering of air, water and solid pollution prevention.

4

New & Renewable Sources of Energy S5 EEE Elective

To give sufficient knowledge about the promising new and renewable sources of energy.

5

Environmental Impact Assessment

S8 Global Elective

To study the various types of environmental pollution.

6

Environment and Pollution S5 CE Elective

To impart the various management techniques available for pollution abatement.

7

Disaster Management S8 Global Elective

To inculcate the basic concepts of disaster management.

8

Environmental Engineering - II S8 CE Core

To understand the various sources and characteristics of wastewater.

The curriculum includes various courses to address Professional Ethics & Human Values. The curriculum also includes courses to develop communication skills.

Sl. No.

Course

Description

1

Life Skills first Year, Core

Human Values, Global Issues & Code of Ethics.

2

Professional Communication

Second Year, Core

To develop vocabulary and language skills relevant to engineering as a profession.

3

Principles of Management Third Year, Core (2015 scheme)

To understand and apply a variety of management and organisational theories.

4

Professional Ethics

Third & Year, Core (2019 scheme)

To create awareness on ethics and human values.

In the present curriculum structure, specific courses to address gender are not included. However, the campus ambience, the work culture provides opportunity for students to demonstrate professional behaviour. The impact of these programs is evident through the confidence portrayed by all students irrespective of their gender

NSS

- NSS units of our college had organised several campaigns such as Clean Campus Green Campus, Planting of tree saplings.
- NSS units of our college along with Inspire India and Moozhikulam Nattariv Padanakalari has conducted a 3 day workshop on June 1 , 3, 5 as a part of Environment Day.
- NSS units of our college along with Green Report channel and Moozhikulamshala Nattarivu Padanakalari has conducted a 9 day webinar series from July 26 to August 3 in association with 2021 Earth Overshoot Day-July 29. Session

is being handled by Mr E. P. Anil (Editor in chief , Green Reporter channel) on the topic Territory of land Daily thoughts. NSS unit of our college had planted 150+ plants made out of eco-friendly sapling bags.

- NSSUnit of Sahrdaya College Kodakara in association with World Yoga Day has conducted a webinar on "Revive vitality " by T Prabha (Certified yoga Instructor & Nutritionist)
- NSSUnit of Sahrdaya College Kodakara had organized a OSM (Open Street Mapping) mass awareness program on 31 January 2021 by MR.JOEL THOMAS GEORGE -NSS Program Officer -Mapathon Program Regional Coordinator (Thrissur Palakkad Region).
- Yoga club is also functioning in a regular basis

File Description	Documents
Any additional information	View File
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View File

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

32

File Description	Documents
Any additional information	View File
Programme / Curriculum/ Syllabus of the courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View File
MoU's with relevant organizations for these courses, if any	No File Uploaded
Institutional Data in Prescribed Format	View File

1.3.3 - Number of students undertaking project work/field work/ internships

106

File Description	Documents
Any additional information	View File
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	View File

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni

A. All of the above

File Description	Documents
URL for stakeholder feedback report	https://sahrdaya.ac.in/wp-content/uploads/2022/04/FEEDBACK-FORMS20-21.pdf
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View File
Any additional information	View File

1.4.2 - Feedback process of the Institution may be classified as follows	A. Feedback collected, analyzed and action taken and feedback available on website
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File Description	Documents
Upload any additional information	View File
URL for feedback report	https://sahrdaya.ac.in/wp-content/uploads/2022/04/1.4.2-Additional-information.pdf

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of students admitted during the year

347

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

2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

170

File Description	Documents
Any additional information	View File
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

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

Strategies adopted for slow learners :

- Remedial Classes are conducted with an aim to improve the academic performance of the slow learners.
- Group Study System is encouraged with the help of the advanced learners.
- Academic and personal counseling are given to the slow learners by the teacher, advisor and the counseling cell.
- Bilingual explanation and discussions are imparted to the slow learners after the class hours for better understanding
- Provision of simple and standard lecture notes/course materials.

Strategies for the advanced learners :

- Advanced learners are encouraged to enroll in MOOC Courses.
- Assignment and Student Seminars on contemporary topics to enable them for placement
- Research Scholars are encouraged to conduct Seminars to the Final year UG and PG Students.
- Advanced Learners are provided coaching classes for competitive exams.
- Students are encouraged to participate and present papers in various Seminars/ Conferences/ Workshops/ Inter-Collegiate Competitions organized by other colleges. Students representing the college in various inter-collegiate meets are provided with the benefit of retest. Participation by the students in the in-house competitions such as Debate, Group Discussion, Problem Solving - Decision Making Exercises and Quiz Programmes are also encouraged. Talented students are motivated to participate in extra-curricular activities, exhibitions and cultural competitions.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/student-support/
Upload any additional information	View File

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

Number of Students	Number of Teachers
1344	100

File Description	Documents
Any additional information	View File

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

Teaching-learning methods adopted by the faculty members include Lecture Method, Interactive Method, Project-based Learning, Computer-assisted Learning, Experiential Learning etc. The Teaching - learning activities are made effective through illustration and special lectures. Courses are taught through Power point presentations to make learning interesting besides oral presenting methods. Lecture method: This method facilitates the teacher to interpret, explain and revise the content of a courses only for better understanding of the subject by the learners. Interactive method: The faculty members make learning interactive with students by motivating student participation in group discussion, role-play, subject quiz, news analysis, educational games, discussion and questions and answers on current affairs. Project - based learning: All department demands project based Learning. The teachers are the guides to the students in the process of preparation of projects. All the UG courses have project work in their final semester. Experiential learning o The faculty members foster learning environment by engaging in Teaching through demonstration, visual aids, Periodical industrial visits, Organizing exhibitions and Presenting papers. Student Seminars: The Student seminars are organized where in the papers are presented by students on recent IEEE papers or journals to enrich their learning experience.

File Description	Documents
Upload any additional information	View File
Link for additional information	https://sahrdaya.ac.in/ict-enabled-classrooms-seminar-halls/

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

Information & Communications Technology (ICT) enabled teaching methodologies and advanced technology are being followed by the faculty members in class rooms. The academic plan with budget,

lesson plan, lab manuals and question banks with solution are made available at the very beginning of the semester. The use of multimedia teaching aids like, LCD projectors, classrooms with internet enabled computer/laptops/tablet systems are usually in use in classroom. The electronic resource packages like DELNET, NPTEL, SPOKEN TUTORIAL and Digital Library are available. The faculty members effectively utilize Audio Visual aids to demonstrate the concepts to the students using the resources from National Programme on Technology Enhanced Learning (NPTEL) to enhance the learning experience. USB Hard disk containing web and video courses (offline) from NPTEL are accessible to faculty and students from the server installed in the library. These courses are the part of LMS. Also Available on local Server. Sufficient number of books, Journals, e-journals and e-books are available in the library. The research journals are available online and facility for accessing these journals is provided through proxy server in the campus. All the departments conduct seminars, workshops and guest lectures on the new developments in the core subjects for effective teaching and learning by the faculty members and students in each semester. Seminar hall is equipped with multimedia facilities using ICT tools. Invited talks and webinars are conducted in seminar hall using ICT facilities.

File Description	Documents
Upload any additional information	View File
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View File

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

2.3.3.1 - Number of mentors

75

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	View File
Circulars pertaining to assigning mentors to mentees	View File
Mentor/mentee ratio	View File

2.4 - Teacher Profile and Quality

2.4.1 - Number of full time teachers against sanctioned posts during the year

100

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	View File
Any additional information	View File
List of the faculty members authenticated by the Head of HEI	View File

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

26

File Description	Documents
Any additional information	View File
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	View File

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

2.4.3.1 - Total experience of full-time teachers

714

File Description	Documents
Any additional information	View File
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	View File

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

- The internal exam committee has been formed under the supervision of the Principal.
- The date of each continuous assessment test(CAT) is scheduled and published in the academic calendar before the commencement of the semester.
- The question paper scrutiny committee is formed in each department with senior faculty members to verify the quality of the question paper. The scrutinized questions are documented.
- All the questions are mapped with the course outcomes
- The bloom's level of each question is addressed in the question paper.
- The exams are conducted by the internal exam cell in various classes with mixed branches to avoid malpractices.
- After the exam, the answer scripts are handed over safely to the concerned faculty members.
- Valued answer scripts are given to the students to verify their marks and rectifications and clarifications are made.
- The marks are entered for each question in the software Linways to keep the database of performance.
- The marks and performance can be accessible by the students and parents on the website.
- Assignments are conducted by subject teachers and documented.
- The regular class performance is also considered for the internal assessment to motivate the students in class performance.

File Description	Documents
Any additional information	View File
Link for additional information	https://sahrdaya.ac.in/college-calendar/

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

- Internal exams are conducted in a transparent way by the internal examination cell constituted by the principal.
- The faculty members inform the method of assessment and modules for each internal tests in the first class committee.
- The mark division for each module and question patterns are instructed to the students at the beginning.
- The students can approach the concerned teacher if they have any clarification in the assessment.
- The marks will be awarded or justification will be provided by the teachers if there are any issues in the evaluation of the answer scripts.
- The class committee meetings are conducted as per the academic calendar with class teachers and student representatives.
- The problems and issues of individual subjects are discussed in the class committee meeting and are rectified by the head of the department or will be escalated to the concerned authority.
- The meeting of student representatives of all the classes is arranged by principal periodically to discuss their grievances and issues. The actions taken are communicated to the students.
- The class advisors take care of each student's grievances and are solved in time in an efficient manner.

File Description	Documents
Any additional information	View File
Link for additional information	https://sahrdaya.ac.in/grievance/

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.

1) PEOs & PSOs of each department including the syllabi of all courses along with their COs are made available in the Institute website (<https://www.sahrdaya.ac.in/>). 2) PEOs and PSOs are displayed in prominent locations of the campus for staff, students and public view. 3) PEOs and PSOs are displayed in Department office, Class rooms, Laboratories and Department library. PEOs and PSOs are also communicated to employers and Alumni through mails and discussion in the Alumni Meeting. 4) PEOs, PSOs and COs of specific lab courses are printed on lab manuals and issued to all students at the beginning of every semester. 5) The POs, PSOs and COs are listed in the course files prepared by the faculty handling each course. 6) During the class committee meeting and faculty meeting PEOs, PSOs, COs are reviewed among the students and staff members. 7) Vision and Mission of Institute and department are communicated to the parents during PTWA Meeting. 8) COs are communicated to the students during the introduction class itself and are reviewed at the beginning and after the completion of each module.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	https://drive.google.com/drive/folders/1EMnciJYUtfSLuuwycKXCR8eOxSaolyId?usp=sharing
Upload COs for all Programmes (exemplars from Glossary)	No File Uploaded

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

The assessment tools used for computing CO attainment are: Direct Assessment Tools which consist of Continuous Assessment Tests (CAT) conducted internally by the college and Semester End Examinations (SEE) conducted by the university. The Indirect Assessment Tool consists of the Course Exit Survey (CES). A clear Rubrics is framed for analysing each subjects. The course exit survey indirectly find level of attainment of COs framed. The Rubrics for assessment is as follows: 1. Direct Assessment Tools - 80%

- Semester End Examinations - 60%
- Internal Evaluation - 40%

a) Continuous Assessment Tests (CAT 1 & CAT 2 each of 40%) b) Assignments - 20% 2. Indirect Assessment Tools -20% At the end of

the course, all the COs are measured using all the assessment methods and the attainment is calculated using the weighted average method. From the CO attainment, the PO & PSO attainment is calculated. This process is repeated for all courses in a semester. After the attainment calculations, a thorough analysis on these attainment levels is done by each department. This analysis includes identifying the gaps and suitable measures to bridge the gap like organizing workshops, seminars and conferences which would help in the further attainment of the POs/PSOs.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	https://docs.google.com/spreadsheets/d/1smbhyOnVrxJmMNrmOxYr0lwOLpkA9kr-/edit?usp=sharing&ouid=114863195782886077580&rtpof=true&sd=true

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

376

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View File
Upload any additional information	View File
Paste link for the annual report	https://drive.google.com/file/d/18P4s8_vgoLsPvC1s4-q3S8ij9ZQgYWTf/view?usp=sharing

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

<https://drive.google.com/drive/folders/1iwOcx3I1ZbS4Isklue0ChRu6TA9fvEl?usp=sharing>

RESEARCH, INNOVATIONS AND EXTENSION	
3.1 - Resource Mobilization for Research	
3.1.1 - Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)	
3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)	
1080667	
File Description	Documents
Any additional information	No File Uploaded
e-copies of the grant award letters for sponsored research projects /endowments	View File
List of endowments / projects with details of grants(Data Template)	View File
3.1.2 - Number of teachers recognized as research guides (latest completed academic year)	
3.1.2.1 - Number of teachers recognized as research guides	
16	
File Description	Documents
Any additional information	View File
Institutional data in prescribed format	View File
3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year	
3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year	
1	

File Description	Documents
List of research projects and funding details (Data Template)	View File
Any additional information	No File Uploaded
Supporting document from Funding Agency	View File
Paste link to funding agency website	nil

3.2 - Innovation Ecosystem

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Sahrdaya Technology Business Incubator

On 16 th January 2018 a new venture, Sahrdaya Technology Business Incubator (STBI), a joint venture of Kerala State Industrial Development Corporation (KSIDC) was started. Dr. Christy Fernandez, chairman of KSIDC inaugurate the function. At present Sahrdaya is hosting five companies in our college through Sahrdaya Technology Business Incubator

IEDC

Innovation and Entrepreneurship Development Center is an institutional mechanism to create an entrepreneurial culture in Sahrdaya to foster the growth of innovation and entrepreneurship amongst the faculty, students, and common people. IEDC Sahrdaya is recognized as the coordinating center of Innovation and Entrepreneurship cluster 10 of APJ Abdul Kalam Technological University. The center is Awarded the Exemplary Performance Award of Kerala Startup mission and the Entrepreneurship Enabler Award of Government 2018 for its contribution to the entrepreneurial ecosystem in Kerala.

CSE -RED HAT ACADEMY

The Red Hat Academy curriculum involves hands-on instruction across platforms, middleware, and cloud technologies. Rather than learning theoretical skills, students learn practical skills based on use cases from thousands of enterprise implementations. We've made Red Hat Academy accessible to as many qualified academic institutions as possible. Eligibility is for nonprofit,

degree-, certificate-, or diploma-granting institutions.

ASAP

Additional Skill Acquisition Programme (ASAP) is a joint initiative of the General and Higher Education Departments, Govt. of Kerala. The motto behind this program is to generate more employable skills in the student population of Kerala by providing sector-specific skill training programs along with regular academic studies. This special training would be conducted during vacation and other holidays. The training would be conducted in three levels, Communicative Skills in English, Basic IT training and Elective Domain Specific Skill Course. The programs are developed, delivered, assessed, and certified with the active participation of the related industries to ensure labor market acceptance of the programs. HCI is collaborating with ASAP as a training service provider for Elective domain-specific skill courses.

IOT and Robotics

Centre for IoT and Robotics research (CIR2) was established in the year of 2018 with a view of promoting the IoT and robotics related research and studies. IoT facility is funded by the Kerala Startup Mission. Various development boards and components like sensors, actuators, communication devices, power supplies etc. required to make IoT related projects are available in the lab. Robotics lab is supported by IIT Bombay under their e-Yantra Lab Setup Initiative (eLSI). 'Firebird V' Robotic training kits and associated components are available to learn the basics of robotics. Under the centre, students are provided with regular hands on trainings in IoT and robotics during semester breaks.

Hardware Club

With a motive to provide a common platform for inter-disciplinary technical activities of the college the hardware club was launched in 2015. The club aims to technically strengthen the students by integrating their skills in various fields of engineering and technology.

Research Centres

Center for Research and Development commonly known as RDC supports R&D activities around the campus, especially among faculty members. A dedicated RDC council has been constituted for

monitoring several progress in this direction. The activities carried out by the council includes the establishment of research labs, encouraging and offering guidance to R&D activities among faculty, periodic monitoring of funded projects, and follow-up of award-winning student projects, and promoting it to funded research projects. The college has been recognized as a SIRO (Scientific and Industrial research Organization) under DSIR (Department of Scientific and Industrial Research) which comes under the Dept of Science and Technology, Government of India.

Placement & HRD Cell

The objective of the HRD Department is transforming individuals into self-directed, focussed and high performing intellects. The institute has close relations with many IT companies and leading organizations that help its graduates getting good exposure and placement. The HRD syllabus focus on developing mastery in communicative skills in English and professional conversational skills needed to be competent and effective in the profession.

AGAPPE - Innovation Hub

Agappe Diagnostics Limited is an in vitro diagnostics company and the collaboration is to provide training to the students on Agappe products and services to establish a mutually beneficial relationship built on academic, scientific and technological cooperation which include project guidance, internship, training programs, industrial visits, industry- institution interface and Placements.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	nil

3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

22

File Description	Documents
Report of the event	No File Uploaded
Any additional information	No File Uploaded
List of workshops/seminars during last 5 years (Data Template)	View File

3.3 - Research Publications and Awards

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

2

File Description	Documents
URL to the research page on HEI website	https://sahrdaya.ac.in/rdc/
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	View File
Any additional information	View File

3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

21

File Description	Documents
Any additional information	View File
List of research papers by title, author, department, name and year of publication (Data Template)	View File

3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

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

38

File Description	Documents
Any additional information	No File Uploaded
List books and chapters edited volumes/ books published (Data Template)	View File

3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

Every year, NSS Unit and various departments of our college conduct various activities under which the students and staff participate voluntarily in community based services with the neighborhood.

1. To show concern towards nature, NSS volunteers of our college planted saplings and created a vegetable garden in their own home, to celebrate Environment Day.
2. NSS unit of the college conducted a book review activity as a part of Reading Day.
3. The importance of yoga, its benefits and acceptance across the globe are discussed, along with the basic asanas, pranayamas through online yoga session.
4. Conducted a webinar on the topic Novel coronavirus, preventive and response measures for future health.
5. Donated 6 Automatic Hand sanitizer made by our own students to different panchayath.
6. Organized a webinar in association with Environment Protection and Research Community (EPRC), discussed Disaster Management Techniques and Emergency flood kit.
7. Conducted a series of webinars on occasion of Nagasaki Day, International Youth Day and Independence Day in collaboration with International Human Rights Association.
8. A social campaign named 'beGandhianforaday' along with planting 100 saplings.
9. An awareness class was conducted on the topic Promotion of Mental Health and well-being among young adults.
10. Classes are conducted for students on life and success.
11. Orientation class on giving a new light hope to the most helpless human beings.
12. In connection with 72nd republic day, NSS unit conducted

flag hoisting along with awareness on Folk remedies for backyard farming

13. Conducts Open Street Mapping mass awareness programme.
14. Organized a road safety rally accompanied with a flash mob in coordination with Kodakara Janamaitri police to give awareness to society.
15. Conducted 3 days of workshops to be aware about earth restoration tools and carbon neutrality.
16. Along with the collaboration of Moozhikulam Shala Nattarivu PadanaKalari and Green Report channel conducted classes about Earth Overshoot Day 2021.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/nss/
Upload any additional information	View File

3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

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

0

File Description	Documents
Any additional information	No File Uploaded
Number of awards for extension activities in last 5 year (Data Template)	View File
e-copy of the award letters	View File

3.4.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year

3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

34

File Description	Documents
Reports of the event organized	View File
Any additional information	View File
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	View File

3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

3790

File Description	Documents
Report of the event	View File
Any additional information	View File
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	View File

3.5 - Collaboration

3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

42

File Description	Documents
e-copies of related Document	No File Uploaded
Any additional information	No File Uploaded
Details of Collaborative activities with institutions/industries for research, Faculty	View File

3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year**3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year**

8

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	View File
Any additional information	View File
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	View File

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.

The college has an extensive infrastructure spread over 25 acres. The infrastructure includes four Academic Blocks (Administrative Block with 5430 SQM, Bio Block with 7895 SQM, Decennial Block with 9180 SQM, Knowledge Centre with 8370 SQM) with well-furnished Class Rooms for Undergraduate (UG) and Post Graduate (PG), Full-fledged Laboratories, Seminar Halls, Drawing Halls, Workshops, Conference Rooms, Board Rooms, Auditorium, Library, Staff Rooms, Exam Control Office, Training and Placement Centre, Computer Centres, Sick Rooms, Fitness center, Stationary Centre, Cafeteria, Reprographic Centres, Guest Rooms, Hostels, Chapel, ATM.

Administrative Area include Principal / Director Office with available space of 96 SQM, Board Room with available space of 100 SQM, Office with available space of 250 SQM, Department Offices/Cabin for Head of Dept with available space of 389 SQM, Class Room-Tutorial Room (UG) with available space of 3684 SQM, Additional Workshop/Labs with available space of 950 SQM, Class Rooms (PG) with available space of 900 SQM, Laboratories (UG/PG) with available space of 5607 SQM, Workshops - Basic (UG/PG) with available space of 1200 SQM, Drawing Halls with available space

of 590 SQM, Seminar Hall with available space of 1195 SQM respectively and a total space of 14961 SQM .

The common facilities in the instructional area include Computer Center with available space of 550 SQM, Library & Reading Room with available space of 4410 SQM, Language Laboratory with available space of 96 SQM respectively and a total of 5056 SQM. The Computer facilities include Internet Bandwidth of more than 255 Mbps, Language Lab, and Printers (43 numbers).

The library facilities include 33402 Volumes, 9186 titles, 101 printed journals, IEEE, DELNET, IETE packages, 8256 Ebooks, Library Management Software, Reading Room Seating Capacity of 425 and MultiMedia P C (56 numbers). Separate Hostels for Men and Women (3600 SQM and 7260 SQM respectively) on the campus with all necessary facilities is provided for study and recreation. College is providing transportation facilities to various localities.

Sahrdaya Technology Business Incubator (STBI), a joint venture of Kerala State Industrial Development Corporation (KSIDC) is established on the campus. At present, SCET is hosting five companies in our college through Sahrdaya Technology Business Incubator. GE Design Lab opened up a new avenue that emphasized the significance and impact of Design Engineering in Medical Devices. The collaboration with Agappe Diagnostics Limited established Agappe lab to provide training to the students on Agappe products and services. It also enhances the soft skill sets and establishes a mutually beneficial relationship built on academic, scientific and technological cooperation. Other added facilities include Accenture computer lab, Robotics lab, and IoT (Internet of Things) lab. The institution has an excellent Training and Placement Centre. The website provides access to official information.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.sahrdaya.ac.in/wp-content/uploads/2020/03/4.1.1-Facilities.pdf

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

SCET has been maintaining a high standard in almost all games among engineering colleges. The Department of Physical Education plays a crucial and intrinsic part of student life on the campus. The department aims to cater an all-round sports, enjoyment and relaxation activities for students, staff, and faculty. The foremost order is to grant services that trigger growth, improvement, confinement of students in a state of the art and safe environment that develops vigor and well being.

The College offers multiple facilities on campus to cater to the physical development of students. The College has amenities for both Indoor and Outdoor games. The Physical Education Department is giving systematic training and coaching for players in various games throughout the year. Leading teams are invited to SCET Campus for practice matches. To give competitive experience and exposures, SCET teams participated in all the Inter Private Engineering College Sports and Games. An annual sports meet is conducted every year in the college ground which could not be conducted during the Covid pandemic period.

The sports infrastructure specifications include Athletic Track of 400Mts 6 lane Badminton Courts(6 Numbers) indoor(13.40 x 6.10Mts), Basketball Court (2 Numbers) cement reinforced with acrylic fiber glass backboards, Chess Club, Cricket Ground (55Mts) boundary with Clay center Wicket, Cricket practice Nets (2 Numbers) with 22yard net Cage with Clay Wicket, Football field (105x60Mts), Health Club (2 Numbers) Single & Multistation Equipments separate for Boys & Girls, Table Tennis Table (2 Numbers) which are ITTF(International Table Tennis Federation) approved Volleyball Court (2 Numbers) with Outdoor Clay Surface (9x9 Mts) and a Yoga Center.

Yoga Classes are being conducted for all first-year students throughout the year. International Yoga Day is observed every year in which all the faculty members are also given one hour of yoga training by an expert which could not be conducted during the Covid pandemic period. Numbers of awards and recognitions for outstanding performance in sports and cultural activities at the state level have been accomplished in the past years. National Sport's day was celebrated in online mode with the active participation of staff and students.

The college encourages the students to take part in cultural activities that enable them to showcase their talent and creativity in various inter-collegiate events. The necessary

training is provided through experts to the participating students. Talent's day is celebrated every year to give a platform for the first-year students to showcase their talents which could not be conducted during the Covid pandemic period. Department-wise association day is also organized which enhances teamwork among the students. Every year, SCET organizes, Arts Day, the cultural-adventure fest along with literary events on the campus. Arts Day was hosted online through Online Platform- Webex during Covid pandemic.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://sahrdaya.ac.in/pe/

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

50

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://sahrdaya.ac.in/ict-enabled-classrooms-seminar-halls/
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

32.31

File Description	Documents
Upload any additional information	View File
Upload audited utilization statements	View File
Upload Details of budget allocation, excluding salary during the year (Data Template	View File

4.2 - Library as a Learning Resource

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

Sahrdaya Central Library, the multi-storey infrastructure marvel with excellent amenities and facilities, functions as the pivotal Learning Resource Hub of the institution. The computerized library with immensesources of information completely meets the needs of students, research scholars and faculty members.

The library resources have been completely bar coded and automated using KOHA, a fully featured, scalable library management system. Koha includes modules for acquisitions, circulation, cataloging, serials management, authority fixing, flexible reporting, label printing etc. KOHA has also features of powerful searching, and an enhanced catalogue display that can use content from Amazon, Google, LibraryThing, Open Library, and Syndetics, among others. KOHA is web based interface -Koha's OPAC, circulation management and self-checkout interfaces are all based on standards-compliant World Wide Web technologies-XHTML, CSS and Javascript-making Koha a truly platform-independent solution.

Name of ILM software : KOHA

Nature of automation : Fully

Version : 20.11.01.000

Year of automation : 2021

A key aspect of the Centre is its thrust on facilitating self study in a variety of different ways including information literacy and study skill acquisition, a key role ignored rather than catered to, by the higher education library service centers in our country. The library facilities include 33402 Volumes,

9186 titles, 101 printed journals, 8256 E-books, Library Management Software, Reading Room, and Seating Capacity of 425 and Multi Media PC of 56 nos.

The Central library provides excellent academic ambience and facilities to its users for their self-learning and learning beyond syllabus, i.e, the faculty members, research scholars, students and other staff of the college can access thousands of research and learning resources in print and online, and derive benefits from the library which is committed to provide high quality resources and services. Excellent collection of books apart from the University prescribed Text books and Reference Books, 24x7 internet access with Wi-Fi connectivity, committed faculty members who motivate students in self-learning process and reputed print Journals. Online journals from IEEE, EBSCO, Delnet, IETE, IEI etc. support the students for self-learning activities. The library has a collection of NPTEL (National Programme in Technology Enhanced Learning activities) lectures of all IITs' and IISc's which is made available throughout the campus using intranet for the use of faculty and students.

Central Library also provides access to NDLI (National Digital Library of India), Shodh Ganga, a reservoir of Indian theses provides a platform for research students to deposit their PhD theses, and make them available to the entire scholarly community in open access, and Online Courses through SWAYAM (Study Webs of Active -Learning for Young Aspiring Minds, MOOC (Massive Open Online Courses) and NPTEL.

Our college website provides link to Central Library. This link helps to search books, journals, magazines, CD/DVD collections, Institutional Digital Repository (managed by DSpace), various e-resources, News Letters, Library Services, rules and regulations, etc

The library amenities include reference, issue, return, renew, e-resources, Book schemes, internet facility-455 Mbps, language lab, Open Access System, OPAC & WEBOPAC, 10 hours service, overnight issue, department libraries- (EC, CS, BM, BT, EEE, and CE) The library has Barcode & Biometric enabled Access Control, Theft control, TV, CCTV surveillance, New Arrivals Display, Research Cubicles, Green Library, Conference Room, News House & Employment information Service, General Knowledge house, Reprographic service, Drinking water, Property counters, Rest rooms etc.

Library has special collections of Atlas, Hand Books, World Record Books, Encyclopaedias, CD/DVDs, Materials for Gate, GMAT, GRE, MBA, GK Books for Quiz Competitions, Career Magazines, Literature-Classics, Braille Kit and Books For the Blind etc. The library provides user friendly training programs including computer aided library use, discussions, debates and Expository talks, orientation program on library use for first year students etc.

Qualified, experienced and dedicated library staffs provide excellent services to the library users to use the library independently to enhance their skills and knowledge.

File Description	Documents
Upload any additional information	View File
Paste link for Additional Information	https://sahrdaya.ac.in/central-library/

4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources

A. Any 4 or more of the above

File Description	Documents
Upload any additional information	View File
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	View File

4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

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

14.43

File Description	Documents
Any additional information	View File
Audited statements of accounts	View File
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

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

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

58

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

4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

Sahrdaya college of engineering and technology is well equipped with modern and sophisticated Computing facilities, to support the ICT needs of students and faculty. All the college blocks are connected to the central server by optical fiber. 24X7 connectivity will be there. A total of 806 computers are available in the campus, spreading over more than 25 various laboratories and centers and are supported by UPS back up. Computers are supported in collaboration with Microsoft through the Microsoft campus agreement and the latest open value Operating system.

Most of the system is loaded with academic packages as per the discipline, including Matlab, Orcad and a dedicated Dell Power edge rack data server which is accessible from inside the campus and around the world. The computational facilities in the campus are well connected through wired as well as wireless networks. College is subscribed to dedicated bandwidth of more than 255 Mbps protected with Hardware firewall Cyberoam 300iNG and Campus WiFi is accessible with WiFi controller Netgear WC7520 for both students and Faculty (24X7), to support the teaching and learning process.

All the facilities are extended to the campus hostels as well. There are several seminar halls which are equipped with e-learning solutions to support computer, Internet access training to teachers and students and other programs for technology upgradation. All classrooms are equipped with a projector, computer, network ports, and multimedia systems to realize Modern ICT based teaching and learning.

The library is elevated to the status of a digital library with a dedicated network and bandwidth, special digital zones and terminals are provided for the modern referencing. All books are barcoded and the digital catalog is accessible through the intranet.

Collaboration with google through the G-suit account, teachers can empower teaching methods with various applications from G-suit. All the internet connections inside campus secured with Hardware firewall by individual login credentials. Google cloud is used for the data back up and protection in academic and administrative levels. A technical supporting mechanism is implemented for staff and students through support mail and WhatsApp.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://sahrdaya.ac.in/cse/cse-department-labs/

4.3.2 - Number of Computers

708

File Description	Documents
Upload any additional information	View File
List of Computers	View File

4.3.3 - Bandwidth of internet connection in the Institution

A. ? 50MBPS

File Description	Documents
Upload any additional Information	View File
Details of available bandwidth of internet connection in the Institution	View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

61.78

File Description	Documents
Upload any additional information	View File
Audited statements of accounts	View File
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View File

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.

The institution with its 17 years of experience has established efficient systems and procedures for maintaining and utilizing every facility under its various domains. Every year the management of SCET spends a considerable amount for maintaining the physical, academic and support facilities and thereby ensuring academic and infrastructure quality.

Maintenance of the Campus:

A building and resource maintenance section headed by the team of Chief Finance Officer (CFO) and a supervisor, is established to oversee the construction and maintenance of physical infrastructure and are working throughout the year.

Sewage Disposal:

The sewage mainly from the hostels and academic buildings are collected and treated inside the SCET Campus. The water by-product is utilized in gardening. Most Sewage is mainly biodegradable and most of it is broken down in the environment.

Solid Waste Management:

The dry solid waste from departments is collected on a daily basis within the campus and transported outside once in a while out of the campus after attaining sufficient quantity. The same is transported to the nearest landfill and solid waste management facility for proper disposal as per State Pollution Board norms.

Chemical Waste:

The quantity of Chemical Waste generated is very minimal. The chemical wastes after reducing its intensity are collected underground through a common drain.

E-Waste disposal:

All un-serviceable E-Waste such as computers, printers, cables, floppies, CD's, mouse and keyboard etc. is collected at the store room. An agreement has been reached with M/s. Aspire Greens regarding the processing and disposal of the E-waste.

Cleanliness and Hygiene:

The Institution has employed approximately 30 cleaning staff for academic, administrative and hostel blocks, 15 staffs for gardening and external cleaning and 8 staffs for Hostel Mess.

Vehicle Parking:

The institution discourages own vehicle usage of students and most of the students adopts college bus facility. For the minimal number of student vehicles (two/four-wheeler) parking facility is provided. Also, separate parking facilities are provided for staff and visitors.

Electric Power Backup:

SCET Campus has two 250KVA generator sets to provide sufficient backup power supply in case of power failure from KSEB.

Potable Water Supply:

The Institute has three academic buildings provided with water coolers and purifiers to cater for safe drinking water. The sports complex/auditorium is provided with purified natural water in portable cans. The quality of drinking water is tested every three months. The fire extinguishers are refilled and kept in a serviceable condition throughout the year.

Budget:

The Equipment, instruments, infrastructure and other facilities require continuous maintenance and repair. Every year, sufficient funds are allocated towards the Maintenance fund. Separate funds are allotted to all H.O.D of the respective department for maintenance of the laboratories and the classrooms which are a part of the teaching and the learning processes.

ICT tools:

The computers are monitored and maintained time-to-time. A system admin team allocated for all academic buildings monitor the same. They also monitor the Campus Local Area Network (LAN) facility of the institution for ubiquitous network connectivity throughout the campus. All the stakeholders have equal opportunity to use this facility as per the rules and the policies of the institution.

Maintenance of Infrastructure:

The infrastructure maintenance is done by the maintenance section headed by the team of Chief Finance Officer (CFO) and a supervisor as and when required. General Insurance coverage is provided for Building, Furniture, fixture etc. Electrical and the plumbing related maintenance is done with the help of Institute appointed skilled persons and the expenditure is done from yearly allotted budget approved by the competent authorities.

Equipment:

All Major/advanced equipment are maintained by Annual Maintenance Contract (AMC). Minor Equipment's are repaired and maintained regularly.

Library:

The Library holdings consist of books, journals, Library Software (Presently using KOHA), e-journals, e-books etc. The books and

journals are bounded. The stock verification is done as a part of regular maintenance. Central library works from 08.00 AM to 06.00 PM. The library has a catalogue facility for easy search of books for the benefit of students and staff. The library also provides LAN facility for the computers and they are loaded with the library software.

Canteen:

The Canteen Maintenance Committee headed by the Chief Finance Officer and Hostel wardens takes care of quality and price along with other related issues of the canteen. The management checks the quality preparation and availability of food frequently.

Additional Facilities:

The college provides three reprographic centres for students and staff for taking printouts/copying necessary textbooks and other resource materials. The sports and games department of the college is meritorious and credit definitely goes to the adequate infrastructure of this department consisting of volleyball court, badminton court football ground, basketball court etc., which can be used by student and staff. The running track and the outdoor facilities are free to use for all the stakeholders. The college is also equipped with three cafeterias for refreshments of students during leisure period.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://sahrdaya.ac.in/wp-content/uploads/2022/04/4.4.2-link.pdf

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

356

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	View File
Upload any additional information	View File
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	View File

5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

5.1.2.1 - Total number of students benefitted by scholarships, free ships, etc provided by the institution / non- government agencies during the year

125

File Description	Documents
Upload any additional information	View File
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	View File

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

B. 3 of the above

File Description	Documents
Link to Institutional website	https://sahrdaya.ac.in/student-support/
Any additional information	View File
Details of capability building and skills enhancement initiatives (Data Template)	View File

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

219

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

219

File Description	Documents
Any additional information	View File
Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

A. All of the above

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

5.2 - Student Progression**5.2.1 - Number of placement of outgoing students during the year****5.2.1.1 - Number of outgoing students placed during the year**

187	
File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File
Details of student placement during the year (Data Template)	View File
5.2.2 - Number of students progressing to higher education during the year	
5.2.2.1 - Number of outgoing student progression to higher education	
32	
File Description	Documents
Upload supporting data for student/alumni	View File
Any additional information	View File
Details of student progression to higher education	View File
5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)	
5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year	
17	
File Description	Documents
Upload supporting data for the same	View File
Any additional information	View File
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	View File
5.3 - Student Participation and Activities	

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

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

0

File Description	Documents
e-copies of award letters and certificates	No File Uploaded
Any additional information	No File Uploaded
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	No File Uploaded

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

Response:

Students Representative (SR) is an indispensable part of Academic and Administrative bodies/committees of the institution such as

- Alumni Association
- Training & Placement Cell
- Departmental associations
- Various other academic committees such as class/course committees of the college.
- Student Council
- NSS
- IEDC
- Technical Associations (IEEE,IEI , Hardware club)
- Industry - Institute Interaction Cell (IIIC)

Student Council

The executive committee of the student's council is elected from Class Representatives through the conventional parliamentary election process. Executive committee members consist of 17

members(12 office bearers +5 year-wise representative). The Student's Representative provides valuable feedback regarding curriculum, teaching-learning and evaluation process. Students Representative oversees the ready availability of teaching aids in classrooms and acts as a point of contact in the official communication process. The student representatives are regularly invited to various committee meetings and the views of students are considered while initiating teaching methodologies.

Additionally, the Students Council organizes various programs in relation such as Onam, Keralapiravi, Engineer's day and Teacher's Day and is responsible for the smooth execution of the various aspects related to the college annual arts and sports event. Thus, Students Council contributes to a healthy interaction among students and teachers regarding academic, co-curricular and extra-curricular activities of the college.

NATIONAL SERVICE SCHEME

? National Service Scheme (NSS) was introduced with the primary objective of developing the personality and character of the student youth through voluntary community service. ? "Education through Service" is the purpose of the NSS. The ideological orientation of the NSS is inspired by the ideals of Mahatma Gandhi. ? College days are made more memorable with NSS activities. This provides us with an opportunity to work for the community. The NSS is a platform where we consider the happiness of others before ourselves.

The institution encourages the students to be a part of the NATIONAL SERVICE SCHEME for their all-round development. The NSS expects students to grow, as a matured human individual through social and community services. The NSS aims at shaping the students' personality through various camps, seminars and invited talks together with social works. A student has to complete 120 hours of campus /community work in One year. The unit of NSS is a self-financing unit with a total of 100 volunteers (50 from IInd year, 50 from IIIrd year)

Composition of NSS

The volunteers are divided into groups/committees and there is a leader for each group. The main committees are Publicity, Poster, Creative, Program, Documentation, Notice Board. NSS volunteers meetings are held once in a month. Executive committee meetings are held occasionally.

Professional Bodies

Every year, a good number of co-curricular activities, both at the department level and college level are organized in the college. Co-curricular activities under the following labels are arranged in the college.

IEEE Student Chapter / BRSI / BMESI / IEI Student chapter / CSI Institution of Engineers Student Chapter

Activities of Department Association which includes National/International conferences, workshops and seminars other activities organized by the college union/students. Participation of the students is encouraged in various seminars, workshops, competitions and winners as well as participants are appreciated. Students are encouraged to create and innovate solutions and present the same in paper presentations/conferences, exhibitions or competitions, tech-fests held in different colleges under the APJ Abdul Kalam Kerala Technological University to enhance their knowledge. The participants are felicitated in the college assembly. The achievements are published in the technical magazine by each department. There are exhibitions organised within the college for each semester and relevant topics are given to the students for micro, mini and semester projects. Groups are formed with identified talents.

IEDC

Innovation and Entrepreneurship Development Center is an institutional mechanism to create an entrepreneurial culture in Sahrdaya and the nearby places to foster the growth of innovation and entrepreneurship amongst the faculty, students and common people.

IEDC Sahrdaya is recognized as the coordinating center of Innovation and Entrepreneurship cluster 10 of APJ Abdul Kalam Technological University. The center is Awarded the Exemplary performance Award of Kerala Startupmission and Entrepreneurship Enabler Award of Government 2018 for its contribution to the entrepreneurial ecosystem at Kerala.

IEDC Skill Clubs are promoted by IEDC for the purpose of skill development attitude among the students. These clubs are aiming to create a maker culture among the students. Also start-up boot camp is a studentfocused program.

Various Clubs

Various clubs are in the institute for the purpose of developing skill, curiosity, technical confidence, maker culture, self learning, updating knowledge about future technologies and peer skill sharing among the students. All the clubs are funded and coordinated from IEDC . Each club works under a faculty member as advisor and a Student Club Lead.

- Hardware Club
- Coders Club
- Creative Club
- Media Club
- Future Tech Club
- ECO club

Industry - Institute Interaction Cell (IIIC)

The Industry-Institute Interaction Cell is functioning in the college as a bridging forum between industries and the college, for mutual benefit. The industries/organizations help the college by sponsoring labs for on campus training for the students and placement to deserving candidates. Further, the industries encourage innovative ideas in the field of engineering and technology.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in
Upload any additional information	View File

5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

13

File Description	Documents
Report of the event	View File
Upload any additional information	No File Uploaded
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	View File

5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

Sahrdaya College of Engineering and Technology, Kodakara, was established in 2002. The first batch was passed out in 2006. An informal Alumni Association of Sahrdaya college Engineering Alumni Association (SCEAA) was formed in 2006. The students formed the association with a view to maintaining their warm bond with their campus. In 2018, the college decided to initiate the formal registration process of the Alumni Association. The Sahrdaya Engineering College Alumni Association was officially registered with the registration number TSR/TC/422/2018.

The main objective of this association is to

1. To serve as a forum to promote and foster relationships among the alumni, the students, the staff, and the management of sahrdaya.
2. To help the Alma mater in its effort to achieve excellence in technical and professional education.
3. To actively and constructively participate in the well-being of the Sahrdaya College of Engineering & Technology, by utilizing the goodwill, of professional engineers of various disciplines spread all over the world.
4. To institute scholarships, revolving loan funds, prizes/medals, etc., for the deserving students of Sahrdaya.

5. To maintain continuous interaction between the past and present students by publishing a newsletter, holding periodical Alumni day celebrations giving awards to the best alumni, or by any other means as decided by the association.
6. To contribute towards improving entrepreneurship development activities, campus placements, library, and centers of excellence at Sahrdaya.
7. To arrange seminars and training programs by eminent Alumni and other personalities for the benefit of students and alumni.
8. To promote entrepreneurship and to educate them on technical matters and better utilization of funds made available from financial institutions through workshops, seminars, lectures, etc, and by providing training to improve the quality of the human resources of business organizations.

Features Of Alumni Association

? The alumni from the major strength of an institution. SCET started in the year 2002 and the first batch of students passed out in the month of June 2006.

? An executive committee was constituted in the year 2006 with Prof K T Joseph as the president and Dr. Nixon Kuruvila as the secretary.

? Currently, the alumni association is functioning well under the guidance of Principal Dr. Nixon Kuruvila as President, Asst. Professor Priya Benny as Secretary and Asst. Professor Jasmy Davies Treasurer.

? Association meets twice in an academic year as it is the flag bearer of the developments in the institution.

? A bank account was opened to receive monetary contributions and do creative spending in a systematic way.

? The main focus is on acquiring a job and working in diverse job environments including working out of state, abroad, and working in a company handling different portfolios Enrollment

? The Association and Management have decided that all the pass-out B.Tech and M.Tech students are enrolled in the alumni association. The Membership fee is Rs 1000/-. Contribution of

Alumni Association

? The most important contribution of the alumni association is that the members share their experiences with their junior students. The association conducts alumni interactions very often.

? The alumni are also a great help for placement activities. ? Technical training and aptitude training programs were conducted during this period.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/secaa/
Upload any additional information	View File

5.4.2 - Alumni contribution during the year (INR in Lakhs)

D. 1 Lakhs - 3Lakhs

File Description	Documents
Upload any additional information	View File

GOVERNANCE, LEADERSHIP AND MANAGEMENT**6.1 - Institutional Vision and Leadership**

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

VISION CENTERED ACTIVITIES

The social responsibility of the institution is driven by the process of defining and measuring "outcomes" as well as core values that relate results to the purpose and its administration is largely the act of effectively balancing social accountability to the dynamics of the marketplace. The following Vision and Mission statements of the institution articulate the cornerstones that direct to shape all the commitments and undertakings of this institution. The institution has revised its Vision and Mission in September 2019 without changing its focus.

The new vision-mission statements are

Vision: Evolve as a leading technology institute to create high

caliber leaders and innovators of global standing with strong ethical values to serve the industry and society.

Mission:

Provide quality technical education that transforms students to be knowledgeable, skilled, innovative and entrepreneurial professionals.

Collaborate with academia and industry around the globe, to strengthen the education and research ecosystem.

Practice and promote high standards of professional ethics, good discipline, high integrity and social accountability with a passion for holistic excellence.

Institutional Core Values :

Unending pursuit of excellence, Unrestricted diversity and open-to-all inclusiveness, Uncompromising transparency in all functional domains, Total commitment to social responsibility and ethical values, Integration of knowledge and work, Urge for research and innovation.

The Vision and Mission statements define the institution's distinctive characteristics: Qualitatively upgraded education and personality enhancement programs prepare the young engineering students to grab opportunities at a global level. Sahrdayans will be ideally brought up citizens, and the nation can rely on them to fulfill its hopes and aspirations. Imparting quality, and technical education, Sahrdayans have been accepted in the worldwide work environment, and this is a vision to be realized in the coming years. With functionally useful, socially responsible, and morally uplifting education as its core agenda, the students are prepared to meet the tough demands that contemporary society produces. The founders have envisaged the vision of providing a skilled and competent workforce to society by imparting quality education and apt training.

Some of the measures envisaged are: The institution especially emphasizes especially on Outcome Based Education and Project-based Learning with well-equipped laboratories and infrastructure. Our college established various Institutional mechanisms such as IEDC, RDC, and STBI to foster the growth of research, innovation, and entrepreneurship. This catalyzed the growth of techno-entrepreneurial culture and the campus has

evolved as a hub of such activities IEDC Summit 2019 for aspiring entrepreneurs hosted in our college, University-sponsored Tech-Fest, Tech-Top National Project Competitions, "Hack 4 People" Hackathon and TEDxSahrdayaCET are hosted in our college. The institution has good campus placements. Special focus is given to bridging the gap between Industry and Academia through Industry Institution Interaction. It has nurtured and produced a plethora of famous alumni who have a positive impact on society through their contribution to the country and to the development activities of the Institution. This College is fully committed to the mission of training the youth in technology for the workplace at global standards with the professed intention of changing the destiny of the nation.

File Description	Documents
Paste link for additional information	www.sahrdaya.ac.in
Upload any additional information	No File Uploaded

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

Decentralization: Institute has a mechanism for delegating authority and providing operational autonomy to all the various functionaries to work towards a decentralized governance system.

1. **Principal Level** The Governing body delegates all the academic and operational decisions based on policy to the Academic Monitoring Committee headed by the Principal in order to fulfill the vision and mission of the institute. The Academic Monitoring Committee formulates common working procedures and entrusts the implementation to the faculty members.

2. **Faculty Level:** Faculty members are members of various committees/cells and are allowed to conduct various programs to showcase their abilities. They are encouraged to develop leadership skills by being in charge of various academic, co-curricular, and extracurricular activities. They are given authority to conduct industrial tours and to have to tie up with industry experts.

Also, they are appointed as coordinators and convenors for organizing seminars/workshops/conferences/FDP. For the effective implementation and improvement of the institute,

various committees are formed. Other units of the institute like sports, library, store, etc. have operational autonomy under the guidance of the various committees/cells.

3. Student Level

Students are empowered to play an active role as a coordinator of co-curricular and extracurricular activities, and social service group coordinators.

Participative Management: The institute promotes a culture of participative management by involving the staff and students in various activities. All decisions of the institution are governed by the board of management. Both students and faculty members are allowed to give suggestions to improve the excellence in any aspect of the Institute.

Strategic Level: The Director, Principal, Academic Coordinator (UG, PG), and Staff members are involved in defining the policies and procedures, framing guidelines and rules regulations pertaining to admission, placement, discipline, grievance, counseling, training placement, library services, etc., and effectively implementing the same to ensure smooth and systematic functioning of the institute. For the various programs to be conducted by the institute all the staff members will meet, discuss, share their opinions and plan for the event and form various committees involving students and coordinate with each other. Faculty members and staff members are also involved in deciding academic activities and examinations to be conducted by the college.

Functional Level: At the functional level, the faculty members participate in sharing their knowledge by discussing the latest trends in technology and the academic progress of students. Staff members of the audit department and institute are involved in the preparation of the annual budget for the institute.

Operational Level: The Director of the institution is a member secretary of the Governing Body (GB). The GB gives suggestions and monitors the procurement, introduction of new programs, and welfare activities. The Principal of the institution is responsible for the academic, non-academic, and administrative activities of the institution. On behalf of the institution, he interacts and corresponds with AICTE, UGC, and Affiliating University. The budget is earmarked for faculty members and students to participate in various programmes organized by the

institute.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	No File Uploaded

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

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

The management focuses on a systematic and continuous process that aims at the long-term and short-term objectives of the institution. The college achieves good results (achieved No.1 among all colleges affiliated with Calicut University) in the state. It aims to implement outcome-based education in the system and strives for its graduates to possess distinguished academic and interpersonal skills. The management feels that the quality of faculty and the education system has a critical role to play in an institution to reach its full potential. With this in perspective, the college management has taken strategic measures to recruit highly specialized and skilled faculty to join the workforce. This is expected to contribute to the growth of the institution as well as improve the resources available for the student community of the institution.

Faculty with PhD

To ensure a core-strong knowledge and improve research, the management aims to have more faculty with Ph.D. Qualification at all levels. The management has introduced initiatives for encouraging faculty to pursue Doctoral Degree such as study leave for faculty pursuing Ph.D., Continuous augmentation of labs with state of the art equipment and software, etc. There has been a considerable increase in the number of faculty with Ph.D. Degree during the assessment period. Faculty with a Ph.D. are better equipped to guide research projects and Ph.D. scholars thus contributing to the global research pool.

File Description	Documents
Strategic Plan and deployment documents on the website	No File Uploaded
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	No File Uploaded

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

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

The Executive Director is the final authority that approves the Quality Policy, students request fee waivers. His role is also to ensure that corrective and improvement actions are initiated. He approves the department-wise budget before submitting it to the board for passing the budget. The Executive Director is also involved in the selection of staff.

The Finance Officer is in charge of all financial transactions of the Institution. He is a member of the Trust Board, reviews monthly accounts, and compares with the budget. He is a member of the Purchase Committee.

The Advisor extends support to the Director in the day-to-day functioning of the College, in various areas. He supports the Director and Principal for smooth conduct of all academic-related programs as per AICTE/University norms. The Advisor serves as a member of the Advisory Board/ Academic Council and is involved in all activities by giving valuable advice for the progress of the Institution.

The Director advises the Executive Director if required for the college administration - General and academic. She makes necessary arrangements to make sure that the mandatory requirements insisted by the statutory bodies, like AICTE, Government and University are fulfilled.

The Joint Director assists the Director in all the routine functions of the Institution and continues to engage in theory/practical classes in his/her area of specialization. She monitors the Staff attendance, leave requests of staff and students in the Bio block. The Joint Director serves as a member of the Advisory Board/ Academic Council and is involved in the activities and gives advice for the progress of the Institution.

The Principal serves as a member of the Advisory Board/ Academic Council and takes care of the smooth day-to-day functioning of the College as per the directions of the Management and norms of AICTE and the University. He maintains general discipline within the campus, especially among students.

HOD:-Majority of academic activities are being handled by faculties in the department guided by the head of the department. The head of the department monitors the department activities, and conducts periodic meetings of all respective faculty members actively involved in handling academic activities in the department.

Administrative committees:- The institution has 40 administrative committees to continuously monitor/guide the academic and administrative activities. The committees comprise key stakeholders including administrators, faculty, staff, alumni, parents, and students.

The roles and responsibilities of the management bodies are documented in the Quality Manual (Reference Proof: Quality Manual)

The service rules for staff include adherence to the rules of the institution as well as duties as dictated in academic and non-academic aspects of the curriculum. The procedures, recruitment, and promotional policies are defined for all teaching and non-teaching staff. These are clearly dictated in the HR policy manual. (Reference Proof: HR Policy Manual)

Grievance Redressal System: The institution established the Student Grievance & Redressal Cell for the purpose of redressing the grievances of students and parents. The respective students/parents and others represent their grievances to the Cell via the Grievance Redressal Portal on the college website.

(Reference Proof: Website link to the portal
<https://sahrdaya.ac.in/>)

Links:-<https://sahrdaya.ac.in/><https://sahrdaya.ac.in/grievance/><https://sahrdaya.ac.in/management/><https://sahrdaya.ac.in/governing-body/>

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Link to Organogram of the institution webpage	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	No File Uploaded

6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination**A. All of the above**

File Description	Documents
ERP (Enterprise Resource Planning) Document	No File Uploaded
Screen shots of user inter faces	View File
Any additional information	View File
Details of implementation of e-governance in areas of operation, Administration etc(Data Template)	View File

6.3 - Faculty Empowerment Strategies

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

The various welfare measures for faculty, staff, and students are:**Faculty Welfare Measures**

1. Staff Savings Scheme (SSS)
2. Maternity Benefits
3. Gratuity
4. Group Insurance
5. Excellence Awards
6. Silver Ring After 5 Years Service
7. Transportation facility
8. Faculty Quarters
9. Sponsorship For Training
10. Faculty Research Seed-money Grant (FRSG)
11. Incentives
12. Emergency Medical Expense
13. Driving School Facility
14. Gym Facility
15. Morning & Evening Tea
16. Hostel Facility for bachelors
17. Faculty/Staff Get-Together
18. Family Get-Together / Tour
19. Staff Tournament
20. X' Mas / Onam Celebrations
21. X' Mas Gift

Staff Welfare Measures

1. Driving School Facility
2. Emergency Medical Expense
3. EPF
4. ESI
5. Family Get Together / tour
6. Gym Facility
7. Gratuity
8. Group Insurance
9. Hostel Facility for Staff
10. Incentives
11. Maternity Benefits
12. Morning & Evening Tea
13. Scholarships to Children Of Staff In SCET
14. Silver Ring After 5 Years Service
15. Staff Tournament
16. Staff/faculty Get Together
17. Transportation facility With Half Rate
18. X' mas Gift
19. X' mas / Onam Celebrations

Student Welfare Measures

1. Annual Celebrations
2. Arts & Sports With Financial Assistance
3. Other Celebrations such as Fresher's day
4. Convocation
5. Counselling
6. Driving School Facility
7. Emergency Medical Expense
8. Excellence Awards & Financial Assistance
9. Gym Facility for girls and boys
10. Group Insurance
11. Hostel Facility
12. NSS
13. Refreshments in Meetings
14. Scholarships and Endowments
15. Send-Off to Graduates
16. She-Care facility
17. Study Tour
18. Transportation facility
19. X'mas / Onam Celebrations
20. Yoga
21. Placement Day

SAHRDAYA INCENTIVES

- Faculty attending reputed International Conference outside the country and presenting papers shall be paid as follows:
 1. 50% of the Conference registration fee subject to a maximum of Rs. 25,000 (Rupees Twenty five thousand)
 2. 50% of the actual flight ticket fare is limited to a maximum of Rs. 50,000/-.
 3. Faculty have to apply through college authorities to funding agencies like UGC/AICTE/DST etc. at least 6 months earlier to the conference and in case the faculty is receiving a travel/registration grant from any agency, the amount of grant given from the college should be refunded after meeting the actual travel and registration expenses.
 4. The above incentives are limited to any one faculty in a financial year according to seniority and rotation.
 5. A faculty member who has availed of this facility will be further eligible only after 5 years.
 6. Faculty attending National / International conferences should present this paper in the immediate faculty meeting.
- Presenting paper in reputed National conferences:
Management will reward Rs 1,000 (Rupees One thousand) for

presenting a paper at a national conference if the paper is published in conference proceedings with ISBN. The incentive is subject to a maximum of Rs 3,000 (Rupees Three thousand) in a financial year.

- Incentives for research projects: An honorarium of Rs.10,000 will be granted by management to faculty who is the principal investigator for a research project funded by State or National Agencies like UGC, AICTE, CSIR, DET, DBT, ISRO, DAE, IET, etc. on completion of the project. The value of the Project should be Rs 10,00,000 (Ten Lakh) or more and the project should be completed on time.
- Incentives for Research publication: Faculty members are eligible for incentives of Rs.3000 per year for every research publication in SCI-indexed journals. If the paper is authored by more than one person, the amount will be shared by all the authors who are associated with SCET. The papers published should include the name of the institution "Sahrdaya College of Engineering & Technology".
- Consultancy projects: Faculty members will be eligible for suitable incentive/share for taking up consultancy works from Industry, Research Organizations, Pvt. Firms etc.
- Incentives for Performance of Faculty: TA/DA to staff on official duty: Staff members deputed from the College on official duty for attending meetings representing the College, accompanying students for competitions, etc., is eligible for registration fee and TA/DA as follows:

Registration fee: Actual on producing the receipt

TA: Actual bus/ Sleeper class train fare

DA: 250 per day (inside the State)

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	No File Uploaded

6.3.2 - Number of teachers provided with financial support to attend conferences/

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

0

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	No File Uploaded

6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year**6.3.3.1 - Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year**

8

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	No File Uploaded
Reports of Academic Staff College or similar centers	No File Uploaded
Upload any additional information	No File Uploaded
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View File

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)**6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year**

85	
File Description	Documents
IQAC report summary	No File Uploaded
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	No File Uploaded
Upload any additional information	No File Uploaded
Details of teachers attending professional development programmes during the year (Data Template)	View File
6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff	
<p>Faculty members of Higher Educational Institutions today have to perform a variety of tasks pertaining to diverse roles. In addition to instruction, faculty members need to innovate and conduct research for their self-renewal, keep abreast with changes in technology, and develop expertise for the effective implementation of curricula. They are also expected to provide services to the industry and community for understanding and then contribute to the solution of real-life problems. Another role relates to the shouldering of administrative responsibilities and cooperation with other faculty, Heads-of-Departments and the Head of the Institute. An effective performance appraisal system for faculty is vital for optimizing the contribution of individual faculty to institutional performance.</p> <p>The system was adopted after a thorough discussion and review. The performance review gives a great opportunity to the faculty concerned and the department to look into the areas for improvement and take necessary remedial steps. The purposes of this evaluation are the following:</p> <p>a) Assess and promote excellence in the teaching/learning process.</p> <p>b) Meet the educational needs of students and the community by continuous monitoring instructional performance.</p> <p>c) Provide a constructive framework for evaluating faculty</p>	

performance by identifying areas of strength and areas for improvement in classroom instruction.

d) Provide a basis for professional growth and development.

The performance of the faculty is evaluated at the end of every year relative to the quality of teaching, contributions to teaching and research, etc. in a prescribed format. The goal of the performance appraisal system is to identify gaps in teaching and learning and provide the necessary directions and guidance to support each individual faculty for assurance of quality. It provides feedback on employees' performance to both the employee and the institute. The major decisions like probation declaration, promotions in higher pay scales, wage hikes, and training needs are taken based on this method.

Based on the teacher's performances, Academic Performance Index (API) scores are proposed for (a) Teaching related activities (35%) (b) Research (40%), and (c) Services (25%). The institution has a well-defined faculty appraisal system in which the contributions of the faculty in diverse roles are assessed.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	No File Uploaded

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The accounts of the college are audited regularly as per the government rules. SCET has separate internal departments. The internal auditor checks receipts including fee receipts and payments with vouchers and necessary supports. He also ensures that all payments are duly authorized. The external auditor conducts statutory audit at the end of the financial year. After the audit thereport is sent to the management for review. The audit statements are uploaded on SCET website. The college fills income tax returns every year within the stipulated time.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/audited-statements/
Upload any additional information	View File

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

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

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	View File
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	No File Uploaded

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

MOBILIZATION

- Tuition fees collected from students constitute our major source of income.
- SCET receives Projects Grants from AICTE /KSCSTE for various projects conducted by students.
- Our institution has been identified as a center for various online examinations such as GATE, CAT, JEE, AIIMS, IBPS, JIPMER, RRB, PSC, SSC, KVPY, UGC NET, NEET-PG, NATA, TOEFL. Payments are received for conducting the same.
- Contributions of the Alumni are utilized for student development and welfare activities.

OPTIMAL UTILIZATION

Recurring Expenses:

- The fee collected is utilized to meet recurring expenses such as salary, academic activities, staff welfare, and

college promotional expenses.

Infrastructural Development and Facility Enhancement:

- Management allocates budget for infrastructural development and to create and upgrade the facilities in tune with the modern trends to meet the requirements.
- According to the financial requirements of each department, the budget amount will be allocated annually.
- Laboratories are upgraded according to the norms of AICTE and University.
- Maintenance works are carried to keep the infrastructure facilities in good condition as per AICTE norms.
- We also provide updated software and hardware to the students for excelling in academics and the latest innovative projects.
- Purchase of Textbooks and Subscription of journals for Library.

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/college-handbook/
Upload any additional information	View File

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

The IQAC of our institution aims to enhance the quality of education.

Practice I

Placement Promotion Activities

- SCET always focuses on the overall improvement of students thereby providing them a platform to showcase their capability and helping them to earn the desired career which opens up a new world.
- The students are categorized based on their skill sets and ability to grasp the concepts and they are incorporated with training that helps them to groom themselves into professionals.

- The first-year students are given life skill training which improves personal self-management and social skills.
- Aptitude Training is given from the first year which helps them to improve their Quantitative, Reasoning & logical skills which in turn results in clearing the recruitment-oriented test and common entrance tests.
- Soft skill training helps to groom interpersonal skills.
- Company-specific mock tests and interviews are availed by students before they attend the recruitment.
- Alumni are invited to campus to motivate the students and to make them aware of the industry trends, which helps to upgrade their technical knowledge with the needs of the industry. These types of training programmes helped the students to acquire placements in different companies. The college keeps updated about each student even after they join their career that creates a special bond between the alma mater and the alumni

Practice II

IIIC & IEDC

IIIC

Realizing the relevance and importance of interaction between Technical Institutions and Industry, Industry Institute Interaction Cell (IIIC) was formed in SCET.

- IIIC is looking for effective interaction between industry, research organizations, and reputed institutes to improve the quality of technical education and enhance the employability of graduates.
- It helps to meet the needs of the industry. It provides input to better teaching-learning processes and better industrial exposure to students thereby enhancing practical knowledge and self-confidence.
- MoUs were signed with many industries from different disciplines of Engineering and Management to ensure effective collaboration between industry and institute in a

formal and systematic manner.

- Many activities are being organized regularly at the department level.

IEDC

- Innovation and Entrepreneurship Development (IEDC) is being promoted in educational institutions to develop institutional mechanisms to create an entrepreneurial culture and to foster techno-entrepreneurship for the generation of wealth and employment.
- The coordination committee of IEDC of SCET with representations from students and faculty members from all departments and activities are being organized with the support of the Kerala Start-up Mission (KSUM).
- Every year the IEDC of SCET organizes various activities. IEDC organizes 'Idea Fest' every year. This event focuses exclusively on innovative ideas from students and enables them to participate in state-level Idea Fest competitions conducted by KSUM. One idea from each department is selected and provided with the financial support of Rs.5000/- for prototype development.
- KSUM initially granted Rs 2 lakhs and after ensuring the effective utilization of funds they sanctioned an additional Rs 2 lakh and allotted Rs. 20000/- for conducting "Technical Workshops in Future Technologies".

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/iqac/
Upload any additional information	No File Uploaded

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

The IQAC continuously monitors and takes necessary actions to

improve the quality of the teaching-learning process. IQAC has put efforts to promote academic excellence and overall performance for the continuous improvement of the institution. The Principal and HODs conduct meetings regularly, to monitor the teaching-learning process of the departments. HOD in turn circulates the information to the teaching and non-teaching faculty of the department, through departmental meetings.

Outcome-Based Education (OBE)

- OBE focuses on the knowledge, skills, and attitude of the graduates as the most important aspect of education.
- Instead of output-based education, OBE relies on outcomes that are assessed and enable students to achieve their goals.
- The quality assurance and accreditation practices of the institution are based on this practice.
- The design of OBE starts by defining the vision and mission of the Institute and departments, POs defined by NBA, PEOs, PSOs, and COs. Internal and external stakeholders, course coordinators, Program coordinators, DAC, and IQAC are involved in this design phase.
- The semester plan and course plan are prepared in advance with reference to University Academic Calendar.
- Course objectives and outcomes are discussed at the beginning of each module.
- Internal Tests and Assignments questions are mapped to COs and Bloom's Taxonomy.
- Rubrics are defined to evaluate direct and indirect attainment levels for COs, POs, & PSOs. The direct assessment tools considered are internal tests, assignments, and University examinations. The indirect tools considered are the Exit survey, Employer survey, and Alumni survey.
- The COs, POs, PSOs attainment calculations are in practice throughout the year.
- As the OBE system is in practice, all the quality

improvement strategies proposed by the different academic bodies in the institute are well implemented.

- The OBE system works towards continuous improvement of the students and proposes remedial actions; it also gives active participation and a better insight to all stakeholders to realize the vision of an institute.

Internal Assessment

- IQAC has introduced a method of preparing question papers for every internal assessment in which the course coordinator sets question papers, verified by the scrutiny committee, and finally approved by HoD.
- Question paper setting is based on Bloom's Taxonomy and indicates course outcomes and Bloom's level.
- Internal assessment tests are conducted in the prescribed format similar to the University examination.
- Invigilation for the same is done by faculty members. The test question paper is discussed in detail after every internal assessment. Marks obtained are uploaded in AMS(Linways) and they will be displayed to students and Parents.
- Weaker students are identified after each internal assessment and remedial classes and tests are given accordingly. Assignments are also given to students as per university regulations. Attainment is calculated based on the internal test, University results, direct and indirect assessments

File Description	Documents
Paste link for additional information	https://sahrdaya.ac.in/iqac/
Upload any additional information	No File Uploaded

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of

A. All of the above

**Internal Quality Assurance Cell (IQAC);
Feedback collected, analyzed and used for
improvements Collaborative quality
initiatives with other institution(s)
Participation in NIRF any other quality
audit recognized by state, national or
international agencies (ISO Certification,
NBA)**

File Description	Documents
Paste web link of Annual reports of Institution	https://sahrdaya.ac.in/annual-report/
Upload e-copies of the accreditations and certifications	View File
Upload any additional information	View File
Upload details of Quality assurance initiatives of the institution (Data Template)	View File

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 year

Our college has taken a number of steps to ensure equality of opportunity and treatment for men and women. Both on statutory and administrative committees, the college regards gender balance as an important consideration and strongly prefers to form committees equally represented.

Women's interests are specifically represented by the women's cell convener who is a faculty of the college. An annual gender sensitization plan is prepared to promote gender equality in our institution. A store for female staff and students named " She Care " is functioning on the campus. Some of the steps taken to promote gender equality in our institution are :

- Establish good gender balance in decision-making and promotes a culture of respect in all activities
- Ensures equality of access to all services provided by the College by conducting seminars, workshops, etc.
- Encourages women faculty to be Conveners in most of the administrative committees formed every year

- Female students with strong leadership qualities are representative of the student council.
- The college encourages equal participation opportunities in Co-Curricular and Extra-curricular activities
- Training and Placements, as well as entrepreneurship opportunities, are provided without any discrimination.
- The female staff is given maternity leave and benefits.

No. of activities conducted according to the gender sensitization action plan :

Year

2020-2021

Number

3

Specific facilities provided for women in terms of:

- a. Safety and security
- b. Counseling
- c. Common Rooms
- d. Daycare center for young children
- e. Any other relevant information

Response:

- a. Safety and Security :

The various safety and Security facilities provided are :

- Student Grievance Redress Cell, Anti-ragging Committee, and Women Grievance Cell is functioning on campus
- The college campus is well secured with compound walls with main and service gates guarded by trained security guards for 24 hours
- Two lady security personnel is available in the girl's hostel
- Separate hostel facility for boys and girls
- On-campus medical consultation by a General Physician

- Hygienic food in the Canteen
- Student's Industrial visits are accompanied by male and female faculty
- SMS to all the parents to ensure the presence of their ward
- Identity card mandatory
- Safest transport facilities for both day scholars and hostellers
- Separate seating arrangement for girls in the bus, classrooms and dining hall
- Surveillance CCTV cameras
- Fire extinguishers and First Aid Box
- Lift facility
- Incinerator
- UV treated Water

b. Counseling

Professionally qualified three counselors are available to help the students to identify and understand their problems and to resolve them. Separate counseling rooms are provided. Counselors meet every student and in case of any special issues, follow-up is also recorded. Counseling services on academic and non-academic matters are also available. All these services are offered to them free of cost.

- **Advisor Support:** The college also has a mentorship program manned by faculty advisors who are allotted up to 20 students for parental care, control and guidance. Advisors provide guidance and arrange remedial measures for slow learners.
- **Career Counseling:** Training & Placement center provides career counseling services such as a career questionnaire to check the career goal of each student, arranging seminars and invited talks to guide them on viable career options and exploring higher Studies options.

c) **Common Room:** There are separate common rooms for females and males with all amenities to take rest if they are sick or need any medical attention. First aid facilities along with medical care are provided in the institution.

No. of Rest Rooms

Girls - 5, Boys - 2

Incinerators

4

No.of Security Personnel

Male- 9, Female - 2 (Ladies Hostel)

No. of Counseling rooms

2

No. of Medical room

1

Annual gender sensitization action plan Sahrdaya College of Engineering & Technology, Kodakara Action Plan by Internal Complaints Committee (Women Grievance Cell) 2020-2021 No. Action Further Details Responsibility Start Date End Date 1 Yoga practice for 1st-year students Weekly one hour by Sr.Ancy ICC-Women cell 8/1/2020 3/1/2021 2 Debate -Dowry system Study group activity from 1 pm to 2 pm ICC-Women cell 10/8/2020 10/8/2020 3 Workshop on value-added products Workshop on value-added products for girls and female staff ICC-Women cell 11/7/2020 11/7/2020 4 Quiz-Human Rights Quiz in connection with Human Rights Day for 2019 and 2020 batch interested students ICC-Women cell 12/10/2020 12/10/2020 5 Webinar on 'Saftey of women in Society' Webinar on 'Saftey of women in Society' ICC-Women cell 4/28/2021 4/28/2021

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

7.1.2 - The Institution has facilities for**A. 4 or All of the above**

alternate sources of energy and energy conservation measures Solar energy
Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/
power efficient equipment

File Description	Documents
Geo tagged Photographs	View File
Any other relevant information	No File Uploaded

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

Solid waste management: The disposal of solid waste is carried out on the campus in a systematic manner. The collection points are provided in various locations on the campus. From the collection source itself, the waste materials are segregated by providing separate bins for paper waste, glass & bottle waste and food waste. Paper waste is collected and burned by means of an incinerator provided near the campus. Food waste from the campus is collected for feeding on the dairy farm. Other wastes such as glass and bottles are collected by the agencies on a regular basis.

Liquid Waste Management: For the effective management of liquid waste, a wastewater treatment plant of capacity 2.5 lakh liters /day is functioning on the campus. The wastewater from the kitchen, washbasin and laundry is collected and supplied to the treatment plant. The collected water is subjected to aeration, and filtration using Activated Carbon Filter (ACF) and Pressure Sand Filter (PSF) to remove the organic matter. After treatment, the water is used for irrigation purposes to maintain a green campus.

E-waste management: The damaged computer hardware is stored in a separate location on the campus. On a periodic basis, the damaged parts are taken by external agencies for suitable recycling. The other waste materials such as unused CD and pen drives are also taken away as scrap material. An MoU with an agency named "Aspire Greens" is signed for collecting the e-waste materials from our campus. Also, most electronic devices contain a variety of materials, including metals that can be recovered for future uses, are dismantled and reused.

Waste Recycling: The food waste is collected by means of composting and it is converted to manure. The manure is further used for the plants in the garden. This means the food waste is being utilized in an environmentally friendly method.

Chemical Waste: Hazardous chemical wastes are filtered through charcoal filters or chemical deactivation is done before disposal. Prior to the disposal of the non-hazardous solution, the fluorescence is checked to ensure complete removal. Treatment is conducted within 10 calendar days of accumulation.

Biomedical and Biotechnology Waste: Disposal of Microbial Culture: The contents are drained from the flasks/tubes/pipettes/Petri plates into the sink under running tap water. The media is autoclaved in lasks/tubes/pipettes/Petri plates at 121 degrees Celsius for 30 minutes at 15 lbs pressure. The caps or stoppers on the containers should be loosened before autoclaving.

Precautions for safe removal of agarose Gel: Ethidium Bromide- containing gels are collected separately, usually in a sealable disposable plastic container such as a bucket with a lid. A dilute solution containing Ethidium Bromide (<0.5 mg/mL), like gel buffer used when running DNA gels is deactivated using charcoal filtration or chemical deactivation. We filter the ethidium-containing buffer through the charcoal filter and then pour the filtrate down the drain. The charcoal filter is then placed in a sealed zip lock bag and disposed of with the ethidium gels as hazardous waste.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	View File
Geo tagged photographs of the facilities	View File

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Any other relevant information	No File Uploaded

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

- 1. Restricted entry of automobiles**
- 2. Use of bicycles/ Battery-powered vehicles**
- 3. Pedestrian-friendly pathways**
- 4. Ban on use of plastic**
- 5. Landscaping**

A. Any 4 or All of the above

File Description	Documents
Geo tagged photos / videos of the facilities	View File
Various policy documents / decisions circulated for implementation	View File
Any other relevant documents	No File Uploaded

7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following
1.Green audit 2. Energy audit
3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

A. Any 4 or all of the above

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

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (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

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Policy documents and information brochures on the support to be provided	View File
Details of the Software procured for providing the assistance	View File
Any other relevant information	No File Uploaded

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 200 words).

This institution is an amalgam of students coming from diverse social, economic, religious, and gender groups to realize diversity and inclusion in all spheres of campus life. Our attempt is for unrestricted

diversity, open-to-all inclusiveness to infuse more and more of diversity into the recruitments, admissions, curricular, co-curricular activities, administrative structures, and practices, without compromising on quality and excellence.

Diverse learning, a high priority on our campus, is another addendum. The component refers to sensitivity to differences, including race, gender, status, ethnicity, religion, sexual orientation, and disability. Most of our students, in fact, are in need of a diversity course as they are not adequately tuned to an inclusive society. Our institution takes special care to organize training, campus discussions, activities, sessions, and co-curricular and extra-curricular programs on the above aspects with necessary facilities.

Ever since the inception of our institution, the Extension, and Social Outreach Programs have been given equal importance as academics.

- Reaching out to the larger sections of the neighborhood population, especially to the deprived groups, for the purpose of equalization of educational opportunities.
- Address to the public through seminars, roadshows, home visits and Flash mob relating to the environment, electricity-saving methods, health education and issues on drugs, nutrition, sanitation, gender issues with stress on gender equity, human rights education, communal harmony, and cultural integration, self-employment generation and use of technology appropriate to the society.

Community-based extension educators such as councilors or members of grama panchayaths communicate local issues and problems to campus-based extension faculty. Together, they conduct a community-based inquiry in order to design educational programs that address local needs. The following kinds of community extension activities are usually undertaken by the campus community:

- Home for the homeless projects
- Orientation webinars on "Covid 19" to the society
- Sanitizers are prepared on campus and given to the public
- Free engineering assistance to the poor in the locality to improve their quality of life
- Visiting the houses of the aged, disabled and differently-abled
- Visiting the houses of gramma panchayath for giving

awareness on computer literacy, electricity consumption audit

- Free water pollution testing facilities for local people
- Rallies and awareness programs on drug abuse, alcoholism, environment conservation, and corruption
- Raising funds to enhance facilities in the public utility establishments such as
- Flood-affected people
- Helping parents who are financially poor with medical treatments
- Donation of a bus to the nearby LP school
- Installation of a biogas plant in another school
- Computer literacy in rural schools
- Water purifier installation in an aided Govt. school
- Helping orphanages by providing daily needs

We believe in transforming the college into an active instrument for social change through extension activities. The college provides an opportunity in approaching and arranging expert talks by experts from different technology domains. Events such as sports and cultural activities are arranged on the premises of the college itself. Even though the college is located in a rural area, we could get eminent personalities from the fields of engineering, business, media, entertainment, art, music, science & technology, NGOs, entrepreneurs are invited for TED talk events

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View File
Any other relevant information	No File Uploaded

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

Various programs are organized in a serene and healthy atmosphere for the overall development of the students for the promotion of universal values. Through these programs, they develop harmony among themselves which are wide in geographical and cultural differences. We fine-tune their talents, help them to face the challenges to be good human beings and mold the future citizens of our country.

The institution also ensures that the students are provided with

excellent student services such as co-curricular, extra-curricular activities, hostel facilities, financial support and career guidance support. Linkage and industry interface are the various other forms of student services the management offers in order to maintain the quality of the programs.

College Programs such as College Day, Environmental Day, Engineers Day, Sports Day, Student Council inauguration, Academic year inauguration, NSS Activities, First-year induction and inauguration program, a send-off to their seniors, Alumni get-together and many such activities are coordinated by our students. We also recognize our students by appreciating and honoring them by giving a silver ring for their course completion and a Diamond Ring to the Best Student of the Year. Students participate in various contests and competitions, Tech-Fests, and also we provide ample opportunities to win prizes. The co-curricular student activities promoted in this institution aim at student competencies such as leadership skills and life skills. The Arts, Sports, NSS Club activates students interested to imbibe values and make them responsible citizens.

The management recognizes every individual as well as collective skills of the employees in the development of its educational goals to put considerable weight on merit, values, commitment and ability of the faculty. This institution is committed to providing a quality learning experience for all our students by continuously improving and updating the quality of all aspects of its services. It seeks to cater to the changing and challenging needs of the society and industry by

- Richly contributing to the academic standing and overall knowledge development of the students.
- Maintaining state-of-the-art infrastructure and a congenial learning environment.
- Regularly enhancing student's competence and urging them to adopt the most modern and innovative methods and tools of learning
- Inculcating moral and ethical values among students and staff
- Promoting research and development programs for the growth of the nation's economy
- Disseminating technical knowledge to the community around through extension programs
- Provide the students with add-on courses and internship opportunities that help in their career progression
- Introducing rigorous, continuous and consistent assessment

procedures, to meet the standards of the Industry

The violation of the privileges of the students is informed through awareness sessions conducted by various cells formed at an institutional level such as anti-ragging and anti-drugs, women's cell and if any complaints reported will be addressed by the grievance cell. All students also have the opportunity for student satisfaction surveys at required intervals during their program. This feedback from the students will be considered for making necessary changes in the programs. Also, awareness sessions are conducted as part of the observance of vigilance week, Swatch Bharat, and yoga.

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

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

A. All of the above

File Description	Documents
Code of ethics policy document	View File
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 File
Any other relevant information	View File

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The college organizes special programs every year on the occasion of the birth or death anniversaries of great Indian personalities as well as celebrates state festivals such as Onam and Kerala Piravi. Our students are on a mission towards a better India by breaking the boundaries of religion and caste. Thoughts of great Indian personalities are sowed into the young minds through the exhibitions and

programs conducted these days. Staff and students get to know the importance of national integrity in the country in general and their roles in particular.

- 26th January Republic Day- On this day, various formal events including flag-hoisting and marchpast are organized and followed by a "constitution awareness program" in which students and staff members get information about their duties towards our nation and the rights given to them by our constitution. By organizing such types of events, the college does its share to instill patriotism and awareness in the next generation.
- 28th February National Science Day: Programs are conducted to develop curiosity towardsscience.
- 15th August Independence day- It is an event marked with the flag hoisting by the Principal/Executive Director and well-practiced march-past by many teams of students. Cultural activities related to the independence movement are exhibited.
- 5th September Teacher's Day (Dr.Sarvpalli RadhaKrishnan Birth Anniversary)- We celebrate Dr. Radhakrishnan's birthday as Teacher's Day with great fervor by organizing programs for the teachers.
- 15th September Engineers day (Birth Anniversary of Sir Visvesvaraya) - We celebrate this day on 15th September consistently as an exceptional tribute to the best Indian Engineer Bharat Ratna Mokshagundam Visvesvaraya.
- 27th July - Death anniversary of Dr. A P J Abdul Kalam - We remember this day consistently as an exceptional tribute to the best Indian scientist, President, and mentor and he is remembered for his contributions to the country in many roles.

- 29-August - National Sports Day (Birth anniversary of hockey legend Major Dhyan Chand): A walkathon was conducted by the Sports team.
- 02nd Oct - Gandhi Jayanthi: Govt. of India is Commemorating the 150th Birth Anniversary of Mahatma Gandhi both at the National and International Level to propagate his message and

contribution made in nation-building. To make this movement really successful and effective, our institution organized an essay writing on the thought of Mahatma Gandhi "Be the change you wish to see in the world".

- Onam: Initiated by the Students Council members, many programs are planned for staff, housekeeping and for students. All participate with full enthusiasm without any caste or status discrimination. Onam Sadya is given to all members of our college.
- Kerala Piravi: A message by a faculty is given in the Morning Assembly. Also, students conduct cultural activities to celebrate state festivals. All can wear the traditional color dress these days.

During the Study group activity, poster making, group discussion and essay writing are conducted to remember the death anniversaries of great Indian personalities. These National festivals are celebrated to make the students aware of their contribution to the nation

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	View File
Geo tagged photographs of some of the events	View File
Any other relevant information	View File

7.2 - Best Practices

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

Best Practice-1

1. Title of the Practice: Project-based Learning

2. Objectives of the Practice :

To encourage the students to have the experience of applying the theory they have learned into projects, thereby making them industry deployable and also creating an interest in entrepreneurship.

Students also get interested to undergo industrial training and internships. This also gives motivation to students to do additional practicals through virtual labs. Students also learn to work in groups and share ideas.

Sponsored Labs / Industry perspective projects are set up in collaboration with Industry to execute the latest projects and enable students to experience the latest software and equipment.

This method provides detailed learning to students and also reduces them to initiate a project on the basis of what they have learned in the classroom.

The results show how the methodology provides three main advantages:

- (1) It facilitates training in technical, personal, and contextual competencies;
- (2) Real problems in the professional sphere are dealt with;
- (3) Collaborative learning is facilitated through the integration of teaching and research.

3. The Context :

Sahrdaya is a well-established institution with a marvelous track record of great achievements in academic fields and in presenting and securing innumerable prize-winning student projects at the National and State levels, establishing itself in engineering education for the last 17 years.

Very unique to Sahrdaya College, we have created an Innovation friendly eco-system on this campus which is instrumental for our students in securing many international and national level prizes first and second, in very highly reputed competitions through which the students have proven their mettle, skills and

competency in engineering and allied areas.

4. The Practice :

More practical training and application skills for engineering students are the need of the day. Industries, in general, are complaining about the lack of practical training and teamwork in fresh engineering graduates.

More entrepreneurs are also the need of the day to fulfill the dream of our Honorable Prime Minister " Make in India".

In this context, project-based learning will enhance the application skills of engineering students. Therefore Student Projects are highly relevant as they help students to acquire requisite skills that they need to demonstrate after the completion of their graduation.

We focus on project-based learning of students from the early stage of Engineering education. Starting from semester-1, Sahrdaya College of Engineering & Technology provides academic rigor to reach up to industry-driven projects. The students involved in projects perform better on various platforms such as academic, competition and industry suitability. It has been found that the students sincerely engaged in projects performed exceptionally well at the national and international levels which made Sahrdaya College of Engineering & Technology in the top institute for engineering in Kerala. In the minor project, student works on projects of their interest while in a major project the students are expected to work on projects with respect to industry expectation for 4-6 months. These projects make the student industry deployable.

Project-based learning encourages student competencies to go beyond subject knowledge, prepare and challenge the student to direct their own learning, solve problems of academic significance and explore beyond the classroom. Therefore Student Projects at the college Level are highly relevant as they help students to acquire requisite skills that they need to demonstrate after the completion of their graduation.

5. Evidence of Success :

Sahrdaya insists all the students do projects every semester starting from the first semester, in addition to the mandatory curriculum insisted on projects.

Students do the projects in groups under the guidance of faculty members applying the theory they have learned. Project exhibitions are organized in every semester, and the best projects are given cash prizes at the end of every semester. The entire staff and students visit the project exhibition and give creative suggestions for improvement.

The students are encouraged to participate in all state and national level project competitions. The winners are honored in the general gathering of staff and students.

Students are also encouraged to submit their projects for funding from different agencies, and many student projects are getting funding and grants. The talented and interested students are given hands-on training in Industry sponsored training centers on the campus and by external sources.

Additional Skill development certification courses are also offered to the students for improving their technical and soft skills. We also encourage students to do additional practicals beyond the syllabus through virtual labs.

A Project Policy handbook is in practice for proper guidance and supports Project-based learning

The Innovation & Entrepreneurship Development Center (IEDC) and Startup Boot camp of Sahrdaya encourage young entrepreneurs and innovators with their ideas, incubate and fund their products establishing them into professionals.

Few to mention, Biomedical students are back from the Rashtrapathi Bhavan with the national honor of Gandhian Young Technological Innovation Award of Rupees 15 lakh for its humanitarian invention of a high-tech fully automated sanitary bed for the totally crippled and bed-ridden, Computer Science students were the winners of IBS Travel Hackathon 2018 and were awarded Rs.60,000 and also the Biotechnology PG students won Rs.1,00,000 in the Dr. Pradeep P Thevannoor Innovation Awards 2018, Techtap National Innovation Contest, Malayalam Manorama Yuva Contest, Srishti and many more in National and International level.

To support our team, the institution has come forward with training centers by industry on our campus. GE Healthcare Training center, Sahrdaya - Accenture Innovation Lab and Knowledge & Research Center, IoT Lab.

Recently Kerala Startup Mission (KSUM) sanctioned an amount of 16.61 Lakh as an Idea Fund for 15 Projects and a few ideas selected for industrial mentoring and laboratory support.

Sahrdaya holds Kerala Startup Mission (KSUM)'s "Exemplary Performance Award" for Innovation and Entrepreneurship Development Activities" from the Chief Minister of Kerala. In November 2018, Sahrdaya was awarded the "Entrepreneurship Enabler Award 2018" from the Electronics and IT Secretary of Govt. of Kerala for the institute's contribution towards the Entrepreneurial Ecosystem system creation in Kerala State.

6. Problems Encountered and Resources Required

All students may not get the opportunity to work on industry-specific projects and get hands-on training. Students' chances to experience the latest technologies and equipment are minimum as industry readiness is limited.

For any innovation to take the product shape, there is a need for the availability of resources and facilities. Our institute has taken an effort to start incubation centers in a separate building named " Knowledge Center". It has access to the large library on two floors. Also, discussion rooms, interview cabins, seminar halls, and video conferencing facility is available in the same building.

It is therefore envisaged that the students will get together to utilize the facilities provided to interact with industry and explore creating innovative projects and implement them into a product for societal needs.

Best Practice-2

1. Title of the Practice: Implementation of Outcome-Based Education

2. Objectives of the Practice: Our institution takes the effort to ensure graduating engineers from all programs demonstrate expected knowledge, skills and attitude leading them to enhance their employability skills and meet the global demands in technology. The college follows an outcome based education by developing course plans with objectives and Program Outcomes(PO) as defined by NBA. The curriculum gaps are plugged through projects, additional labs, add-on courses, industry connect, etc.

other than the curriculum and evaluated systematically through different assessment tools. All activities on campus (academic, activities beyond the curriculum, co-curricular and extra-curricular) were focused on developing the POs leading to effective implementation of Outcomes-Based Education (OBE), as it would then lead to global recognition of our graduates and to have a strong role in the society.

3. The Context:

Global demand for qualified and qualitative engineering human resources is increasing day by day and the learning process has become dynamic in the current century. A technically strong knowledge-based society is very much needed for a fast developing nation like India.

To meet the challenges and demands of the present and future it is the need of the hour to groom the engineering students to meet the demand and expectations of the country and world. Keeping this in mind and following the norms of the NBA our institution is practicing the best teaching and learning methods on the campus such that the outgoing students from the institute is a global asset and proven professional to contribute their best for the Nation-building by availing all the resources and facilities for their capacity building.

A need to define, develop, implement and measure student learning through the attainment of various outcomes: Course Outcomes (COs), Program Outcomes (POs) and Program Specific Outcomes (PSOs). The institution gives importance to technical and non-technical activities in the overall development of our students. With a need to implement OBE, every association of the student is defined and measured as mentioned below:

- Academics is direct through Continuous Assessment tests (CAT), Project-based Learning, Assignments, Seminars, University Exams Quizzes and indirectly through a feedback system from all stakeholders
- Activities beyond curriculum like co-curricular and extra-curricular activities. The campus witnesses the University Level Techfest, National IEDC Summit, Sahrdaya Tedx, and MoUs with notable companies leading to further development and measurement of the student competencies.

4. The Practice :

This initiative by the Institution lead to innovations in the classroom by teachers in the delivery methods, innovation by faculty in assessment tools and hence, contributing to the overall development of the student learning, with conscious efforts in developing the expected program outcomes defined by NBA, and hence ensuring our graduates have global recognition. Learning outcomes are statements specifying what learners will know or be able to do as a result of a learning activity. Describe the desired condition -the knowledge, skills or attitudes required to fulfill a need.

The question papers of each course are prepared in such a way that it maps to the course outcomes of the respective subject and six levels of learning - remember, understand, apply, analyze, evaluate and create as per Bloom's Taxonomy. For a better teaching-learning process evaluation, it is always preferred to adopt a method to evaluate the quality of the question paper a teacher has set. The output of a good quality question paper identifies, how many of our students have understood the concepts we have taught and also how well they are able to apply them. The process of question paper quality checking is implemented in the academic year 2020-2021. The details are attached. The continuous assessment of the students is carried out by calculating the marks of students in internal exams and assignments. After each internal exam faculty of each course is publishing the result analysis and it is being compared with that of the previous exam. Based on that concerned faculty is supposed to submit the action plan to take. This improved competency of the students resulted in enhanced student performance both when on campus and after graduation as our alumni.

We would like to add that this journey of embracing OBE was a collective effort by all stakeholders, both direct and indirect. The initial learning was from the series of training programs conducted by the NBA. This was then followed by a series of brainstorming sessions to comprehend and implement the processes of OBE. The academic leaders were able to perform with unconditional support from management.

The institute is having well-qualified faculty and state-of-the-art workshops and engineering laboratories to impart the best teaching. The faculty are trained to carry our Outcome-based Education (OBE) based teaching methodology where conducive teaching-learning practices were implemented.

The lectures are designed to provide more interactive sessions of

learning with 50% blackboard teaching, 25% Powerpoint, 15% student interactive method and 10% assignments. All the faculty members are encouraged to appear for online certification courses in their respective teaching subjects conducted by NPTEL and Pedagogy principles in OBE based education system. Institute is one of the best NPTEL local chapters in the state.

To conclude, there were no constraints or hurdles in this path of adopting OBE. In addition, all academic leaders have willingly shared this journey and learning experience on various platforms, to help other institutions of higher education to grow and contribute to the progress of the nation. Few are listed below:

- Students will understand what is expected of them and teachers will know what they need to teach during the course.
- OBE does not specify a specific method of instruction, leaving instructors free to teach their students using any method. Instructors will also be able to recognize diversity among students by using various teaching and assessment techniques during their classes.
- Student involvement in the classroom is a key part of OBE. Students are expected to do their own learning so that they gain a full understanding of the material. Increased student involvement allows students to feel responsible for their own learning, and they should learn more through this individual learning.
- Lecture Notes are preferred over the subject materials and students are encouraged to use the library for reference to corresponding subjects.
- Study Group Activities are conducted where students have role-based tasks, Quizzes and other opportunities to explore their passion.

5. Evidence of Success

Focused efforts by faculty in truly embracing OBE, happened through small innovations in the teaching-learning process, innovations in assessment tools and ensuring that every student has the expected knowledge, skills and attitude. Faculty contribution towards successful implementation of OBE is reflected in enhanced student performance.

A few parameters that are considered as evidence towards successful implementation of OBE through faculty contribution are:

Enhanced quality of projects, Enhanced number of students attending online courses, Enhanced professional body activities, Enhanced number of awards secured by students in National and International project competitions, activities Improved performance in cultural and sports contests held in-campus and outside campus, Enhanced on-campus placements, Enhanced off-campus placements, Improvement in the average and highest pay package offered, Marginal improvement in a number of successful entrepreneurs.

The above evidence of improvement in student performance can be attributed purely to faculty contribution ineffective implementation of OBE.

This effective implementation of OBE, leading to improved student performance through faculty contribution eventually resulted in 80% Placements for 2018 & 2019 pass outs, students getting GATE Qualified, Project grants, students getting admitted to premier institutions for higher studies, becoming entrepreneurs and the results also have proved that the effectiveness of this method.

6. Problems Encountered and Resources Required

Problems Encountered

The outcome-based education identifies the gaps in the attainment of course outcomes through feedback from different stakeholders. One of the major concerns is that feedback data is related to conducting Add-on courses related to each course. However, as per the present curriculum, the time period for the provision of Add-on courses are very much limited. Also, the familiarization with practices in the industry is identified as another important parameter for attaining the course outcome. Hence adequate time shall be allocated in the curriculum to address these requirements for the effective implementation of outcome-based education.

Apart from this, another problem encountered is the computation of attainment of course outcome based on the End semester results. The end semester results presently represent the cumulative marks from Continuous Internal Evaluation and the End Semester examination. Based on this calculation of attainment of individual course outcomes it becomes unclear. Hence there shall be an enhanced methodology specified in the curriculum supporting the outcome-based education, which also helps in proper quantification of attainment of course outcomes.

Project Policy**Question Paper Quality**

File Description	Documents
Best practices in the Institutional website	Nil
Any other relevant information	Nil

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

VISION CENTERED ACTIVITIES

Our institution's social responsibility is driven by the process of defining and measuring "outcomes" as well as "core values" which relate results to the purpose and its administration is largely the act of effectively balancing social accountability to the dynamics of the marketplace.

The following Vision and Mission statements of the institution articulate the cornerstones that direct to shape all the commitments and undertakings of this institution.

Vision :

Evolve as a leading technology institute to create high-caliber leaders and innovators of global standing with strong ethical values to serve the industry and society.

Mission :

Provide quality technical education that transforms students to be knowledgeable, skilled, innovative and entrepreneurial professionals.

Collaborate with academia and industry around the globe, to strengthen the education and research ecosystem.

Practice and promote high standards of professional ethics, good

discipline, high integrity and social accountability with a passion for holistic excellence.

The vision provides us the ultimate institutional direction and the mission, clarity of understanding regarding institutional definition. We have revised our Vision and Mission in September 2019 without changing its focus.

Institutional Core Values :

- Unending pursuit of excellence
- Unrestricted diversity and open-to-all inclusiveness
- Uncompromising transparency in all functional domains
- Total commitment to social responsibility and ethical values
- Integration of knowledge and work
- Urge for research and innovation

The Vision and Mission statements define the institution's distinctive characteristics :

Qualitatively upgraded education and personality enhancement programs prepare young engineering students to grab opportunities at a global level. Sahridayans will be ideally brought up as citizens, the nation can rely on to fulfill its hopes and aspirations.

Imparting quality, and technical education, Sahridayans have been accepted in the worldwide work environment, and this is a vision to be realized in the coming years.

With functionally useful, socially responsible and morally uplifting education as its core agenda, the students are prepared to meet the tough demands that contemporary society produces. The founders have envisaged the vision of providing a skilled and competent workforce to society by imparting quality education and apt training.

Some of the measures envisaged are:

The institution especially emphasizes especially on Outcome Based Education and Project-based Learning with well-equipped laboratories and infrastructure. Our college established various Institutional mechanisms such as IEDC, RDC and STBI to foster the growth of research, innovation, and entrepreneurship. This catalyzed the growth of techno-entrepreneurial culture and the

campus has evolved as a hub of such activities; IEDC Summit 2019 for aspiring entrepreneurs hosted in our college, University-sponsored Tech-Fest, Tech-Top National Project Competitions, "Hack 4 People" Hackathon and TEDxSahrdayaCET are hosted in our college.

The institution has good campus placements. Special focus is given to bridging the gap between Industry and Academia through Industry Institution Interaction. It has nurtured and produced a plethora of famous alumni who have a positive impact on society through their contribution to the country and to the development activities of the Institution.

This College is fully committed to the mission of training the youth in technology for the workplace at global standards with the professed intention of changing the destiny of the nation for the better and competing successfully in the shifting global job market. This industry blend at the college has helped our graduates to perform well in the industry and many could reach senior leadership positions at various MNCs and corporate houses.

Many of our students have qualified in competitive exams and are working in Central and Govt. sectors. Also, pursuing higher studies such as Ph.D., M.Tech and MBA in premier institutions and from recognized high ranking foreign universities. We have MoU's signed with reputed organizations and also with the premier institution in Wilmington University, USA. Some students have become entrepreneurs and established their own companies across the globe.

SCET is collaborated with a number of organizations and established a few collaborative centers of excellence such as GE Healthcare Training center, Accenture Innovation Lab, Agappe Training center, Research Center and IoT Lab for innovation, to inculcate industry-ready skills among the graduates. The campus facilities are continuously augmented and strengthened. Innovative Centres of Excellence/incubation Centres and cutting-edge laboratories give the required industry blend to the students.

A variety of teaching and learning techniques are employed to impart knowledge and skills to students. The Institution has put effort into encouraging innovation in Teaching and Learning processes.

The strength of the institution is well-qualified, experienced,

dedicated faculty and staff members with an excellent educational background. A special focus on promoting R&D for the faculty and students is initiated. A faculty research seed grant is given every year and the student's publications in Journals are encouraged to boost their morale. For upgrading faculty skills, the institution encourages research, seminars, conferences, and faculty development programs. Publication of articles and membership in professional bodies is encouraged by the management. This has resulted in a good number of publications and few are now Research guides.

File Description	Documents
Appropriate web in the Institutional website	View File
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

- The college has decided to upload the SAR as part of NBA Accreditation for four departments (BME, BT, CSE and CE)
- Departments have decided to organize AICTE and KTU sponsored Faculty Development Programs
- More focus to be given to improving the Admission, Placement, and University Results
- To enhance industry-institute collaborations through MoUs, industrial training, industrial visits, internships, etc.
- To enhance innovation and entrepreneurship activities amongst students

Academic Calendar