

YEARLY STATUS REPORT - 2020-2021

Part A

Data of the Institution

1.Name of the Institution	Sree Buddha College of Engineering		
• Name of the Head of the institution	Dr. K. Krishnakumar		
• Designation	Principal		
• Does the institution function from its own campus?	Yes		
• Phone no./Alternate phone no.	04792375440		
• Mobile no	944725403		
• Registered e-mail	<pre>sreebuddha@ktu.edu.in</pre>		
• Alternate e-mail	principal@sbce.ac.in		
• Address	SREE BUDDHA COLLEGE OF ENGINEERING, NOORANAD		
• City/Town	Alappuzha		
• State/UT	Kerala		
• Pin Code	690529		
2.Institutional status			
Affiliated /Constituent	Affiliated		
• Type of Institution	Co-education		
	_		

Rural

• Location

University

04792375442

04792375442

6369282379

sbceiqac@gmail.com

me.senthils@sbcemail.in

Financial Status
 Self-financing
 Name of the Affiliating University
 APJ Abdul Kalam Technological

•	Name of	of the	IQAC	Coordinator
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- Phone No.
- Alternate phone No.
- Mobile
- IQAC e-mail address
- Alternate Email address

3.Website address (Web link of the AQAR (Previous Academic Year)

4.Whether Academic Calendar prepared during the year?

• if yes, whether it is uploaded in the Institutional website Web link:

5.Accreditation Details

ł	https://sbce.ac.in/academics/acad
<u>e</u>	emic-calendar/

https://sbce.ac.in/academics/inte

rnal-guality-assurance-cell-igac/

Dr. M. S. Senthil Saravanan

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	В	2.58	2014	10/12/2014	09/12/2019
Cycle 2	B+	2.64	2019	15/11/2019	14/11/2024

Yes

6.Date of Establishment of IQAC

06/09/2008

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

Institutional/Depa rtment /Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Civil Engineering	Student Project	KSCSTE	2020	90000
Mechanical Engineering	Student Project	KSCSTE	2020	20000
Electronics and Communicatio n Engineering	Student Project	KSCSTE	2020	35000
Civil Engineering	CERD	APJ Abdul Kalam University	2020	200000
Biotechnolog Y	CERD	APJ Abdul Kalam University	2020	180000
Mechanical Engineering	CERD	APJ Abdul Kalam University	2020	200000

8.Whether composition of IQAC as per latest Yes NAAC guidelines

• Upload latest notification of formation of <u>View File</u> IQAC

9.No. of IQAC meetings held during the year

- Were the minutes of IQAC meeting(s) and Yes compliance to the decisions have been uploaded on the institutional website?
- If No, please upload the minutes of the <u>View File</u> meeting(s) and Action Taken Report

10.Whether IQAC received funding from any No of the funding agency to support its activities

during the year?

• If yes, mention the amount

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

Academic audit

Review of University Examination results

Patents and Funding Projects

Annual Submission of report to NAAC

Training and Placement Activities

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

Plan of Action	Achievements/Outcomes
Implementation of OBE based Lab Manuals	Lab Manuals are prepared as per OBE
Encouraging Faculty members about IPR activities	one national patent published and one International Patent granted

13.Whether the AQAR was placed before statutory body?

Yes

• Name of the statutory body

Name	Date of meeting(s)
Internal Quality Assurance Cell	26/03/2022

14.Whether institutional data submitted to AISHE

e Institution		
Sree Buddha College of Engineering		
Dr. K. Krishnakumar		
Principal		
Yes		
04792375440		
944725403		
sreebuddha@ktu.edu.in		
principal@sbce.ac.in		
SREE BUDDHA COLLEGE OF ENGINEERING, NOORANAD		
Alappuzha		
Kerala		
690529		
Affiliated		
Co-education		
Rural		
Self-financing		
APJ Abdul Kalam Technological University		

• Name of the IQAC Coordinator			Dr. M. S. Senthil Saravanan			
• Phone No.			0479237544	2		
• Alternate phone No.			0479237544	2		
 Mobile IQAC e-mail address Alternate Email address 3.Website address (Web link of the AQAR (Previous Academic Year) 4.Whether Academic Calendar prepared during the year? 			6369282379			
			sbceiqac@g	mail.com		
			me.senthil	s@sbcemail.	in	
			<pre>https://sbce.ac.in/academics/int ernal-quality-assurance-cell- igac/ Yes</pre>			
5.Accreditation	n Details					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to	
Cycle 1	В	2.58	2014	10/12/201 4	09/12/201 9	
Cycle 2	B+	2.64	2019	15/11/201 9	14/11/202 4	
6.Date of Establishment of IQAC			06/09/2008			
7.Provide the l	·	/ Central / State (OIP/World Bank	Government /CPE of UGC et	с.,		

Institutional/Dep artment /Faculty	Scheme	Funding Agency		Year of award with duration	Amount
Civil Engineering	Student Project	KSCSTE		2020	90000
Mechanical Engineering	Student Project	KSC	STE	2020	20000
Electronics and Communi cation Engineering	Student Project	KSCSTE		2020	35000
Civil Engineering	CERD	APJ Abdul Kalam University		2020	200000
Biotechnolo gy	CERD	APJ Abdul Kalam University		2020	180000
Mechanical Engineering	CERD	APJ Abdul Kalam University		2020	200000
3.Whether compo NAAC guidelines	sition of IQAC as J	per latest	Yes		
• Upload latest notification of formation of IQAC			<u>View Fil</u>	<u>e</u>	
O.No. of IQAC me	etings held during	the year	4		
• Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?			Yes		
-	e upload the minutes nd Action Taken Rep		<u>View Fil</u>	<u>e</u>	

activities during the year?	
• If yes, mention the amount	

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

Academic audit

Review of University Examination results

Patents and Funding Projects

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Training and Placement Activities

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

Achievements/Outcomes					
Lab Manuals are prepared as per OBE					
one national patent published and one International Patent granted					
Yes					
Name of the statutory body					
Date of meeting(s)					
26/03/2022					
14.Whether institutional data submitted to AISHE					
Date of Submission					
15/02/2022					
15.Multidisciplinary / interdisciplinary					

16.Academic bank of credits (ABC):

17.Skill development:		
18.Appropriate integration of Indian Knowled culture, using online course)	lge system (teac	hing in Indian Language,
	-	
19.Focus on Outcome based education (OBE)	Focus on Outco	ome based education (OBE):
20.Distance education/online education:		
Extended	d Profile	
1.Programme		
1.1		14
Number of courses offered by the institution across all programs during the year		
File Description	Documents	
Data Template		<u>View File</u>
2.Student		
2.1		397
Number of students during the year		
File Description	Documents	
Institutional Data in Prescribed Format		View File
2.2		267
Number of seats earmarked for reserved category State Govt. rule during the year	as per GOI/	
File Description	Documents	
Data Template	Ν	No File Uploaded
2.3		390

Number of outgoing/ final year students during th	ne year	
File Description	Documents	
Data Template		<u>View File</u>
3.Academic		
3.1		91
Number of full time teachers during the year		
File Description	Documents	
Data Template	No File Uploaded	
3.2		104
Number of sanctioned posts during the year		
File Description	Documents	
Data Template	N	No File Uploaded
4.Institution		
4.1		40
Total number of Classrooms and Seminar halls		
4.2		3,81,31,521.11
Total expenditure excluding salary during the year (INR in lakhs)		
4.3		326
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 curriculus documented process	m delivery throug	h a well planned and
The college is associated with Kerala's APJ Abdul Kalam Technological University and follows the university's curriculum. All newly enrolled students are required to attend mandatory Induction Training, as per AICTE requirements, to strengthen their		

essential ideas and language abilities.

The Internal Quality Assurance Committee (IQAC), which was founded in 2008 to keep up with the changing needs of the curriculum, oversees the institute's internal quality assurance process. Academic activities are planned well ahead of the start of the semester in accordance with the University's Academic Calendar, which is scrupulously followed.

Intensive Teaching Workshops and Faculty Development Programs are used to provide teachers with innovative teaching approaches in order to improve the teaching and learning experience. During the delivery of academic courses, students engage in learner-centric strategies such as web-related assignments, group discussion, utilisation of NPTEL lectures, projects, seminars, training programmes, industrial visit/internship, and so on. Value-Added Programs (VAP), seminar, and library hours are all included in the schedule.

The Department Heads and the Principal review the portions covered by the staff members as well as the student's attendance on a regular basis. Additionally, the Student Affairs Council (SAC), which facilitates student-faculty meetings, has recently been added to the feedback process.

File Description	Documents
Upload relevant supporting document	No File Uploaded
Link for Additional information	https://sbce.ac.in/academics/internal- quality-assurance-cell-iqac/

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

The institution has adopted a streamlined academic calendar system based on the university's academic calendar, KTU. The academic calendar is created by the Principal in collaboration with the Head of Department (s). Our academic calendar represents the institution's planning and includes dates for the start and completion of the syllabus, as well as schedules for internal exams. It also indicates the dates of the term's end examination and the start of the following semester. The academic calendar also includes tentative dates for practical tests, viva-voice, and theory exams. It helps to improve the teaching-learning qualities, to finish the assigned task within deadlines and instill among teachers and students about the importance of professional standard. The Principal holds curricular and extracurricular review meetings on a monthly basis to ensure that all of the activities on the academic calendar are being implemented and progressed. If necessary, revisions to activity schedules are made as a result of these review sessions. Extra lectures are also planned to finish the syllabus before the university exams.

File Description	Documents
Upload relevant supporting document	No File Uploaded
Link for Additional information	https://sbce.ac.in/academics/internal- quality-assurance-cell-iqac/
1.1.3 - Teachers of the Institution participate A. All of the above	

A. All 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

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<u>View File</u>
Any additional information	No File Uploaded

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

File Description	Documents
Any additional information	No File Uploaded
Minutes of relevant Academic Council/ BOS meetings	No File Uploaded
Institutional data in prescribed format (Data Template)	<u>View File</u>

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)

23

File Description	Documents
Any additional information	No File Uploaded
Brochure or any other document relating to Add on /Certificate programs	No File Uploaded
List of Add on /Certificate programs (Data Template)	<u>View File</u>

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

169

File Description	Documents
Any additional information	No File Uploaded
Details of the students enrolled in Subjects related to certificate/Add-on programs	No File Uploaded

1.3 - Curriculum Enrichment

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

To incorporate and amalgamate the crosscutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum, Institute has introduced courses like Values and Ethics in Profession, Human Resource Management and Environmental Science etc. in its UG programme. College has gender sensitization committee which is organizing seminars, workshops, group discussions to sensitize the gender issues. Class representatives are equal with both boys and girls. Around 40% of the students are female and the faculty is well balanced. Without gender discrimination female students are represented in NSS and other committee

Environment and Sustainability are one of the ardent issues, addressed by the Institute. Regular awareness programs are conducted including the popular ones being 'Tree Plantation' and 'Clean IndiaSwachh Bharat Campaign'.

The University has made it mandatory to study the "Constitution of India ,Professional Ethics and Sustainable Engineering" to provide basic information about Indian constitution, to identify individual role and ethical responsibility towards society and to understand human rights and its implications.

File Description	Documents
Any additional information	No File Uploaded
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	No File Uploaded

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

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

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

File Description	Documents
Any additional information	No File Uploaded
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	<u>View File</u>

1.4 - Feedback System

A. All of the above

File Description	Documents
URL for stakeholder feedback report	www.sbce.ac.in
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	No File Uploaded
Any additional information	No File Uploaded

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	No File Uploaded
URL for feedback report	www.sbce.ac.in

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

397

File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	<u>View File</u>

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

557

File Description	Documents
Any additional information	No File Uploaded
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

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

Institute admits diversified students from different social and economic backgrounds and the ability and extent of learning of the students is highly influenced by their personal abilities and other attributes. Institute has developed a structured mechanism for assessing the learning levels of the students.

The first interaction occurs during the mandatory AICTE Induction Programme, with professors assessing, identifying, and differentiating thestudents. Mentees' learning ability is identified by the Mentors based on their academic performance, behaviour, social and psychological aspects during the individual interaction session. The first Continuous Evaluation (CA 1) process helps the faculty identify Slow and Advanced Learners. With regard to the program for Slow Learners, each mentor is assigned with a group of students per year to provide one-toone counseling for overall improvement. Extra and Remedial classes are conducted for the slow learners including efforts to improve the basic skills in Mathematics and Engineering subjects.

Advanced learners are motivated to attend webinars, seminars, expert lectures and are encouraged to be members of various professional bodies like IEEE, CSI, E-Cell, publish papers, involve in innovative project and research work, enroll and get certified in MOOC courses and competitive examinations like GATE, GRE, CAT, etc.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

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

Number of Students	Number of Teachers
927	91

File Description	Documents
Any additional information	No File Uploaded

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

The college has been focusing on innovative and creative ways of disseminating, sharing, and facilitating knowledge development in

students, adopting student-centric methods which are central to Outcome-Based Education (OBE).

Course Delivery Methods

Group discussions Seminars/Mini projects Technical Reports/ Case studies, Simulations and experimental exercises Lab experimental work Class Assignments/Quizzes I

ndividual learning

E-learning tools like NPTEL videos, SWAYAM, Coursera, IIT Bombay -Spoken Tutorial Project, etc. to let students learn independently and enhance classroom learning. Encouraged to enroll and get certification for add-on online courses for self-paced learning.

Experiential learning

Student-centric learning is provided in the practical sessions to apply concepts learned in the classroom. Internships/ Vocational training. Final Year group Projects, Technical Fest and Workshops. Short Visit to nearby industries/labs

Participative /collaborative learning

Exhibiting at intra-college, state, and national project competitions and technical festivals for R&D projects Invited talks by experts and alumni from the industry and academia. MOUs are signed with leading industries to bridge the gaps in the curriculum. Problem-based learning promotes students' critical thinking to find solutions in real-life situations. Faculty also map the learning outcomes from the above initiatives.

File Description	Documents
Upload any additional information	No File Uploaded
Link for additional information	Nil

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

SBCEdeveloped LMS Platform in-house forthe faculty of the institute and is a learning platform used to augment and move existing learning environments online in the wake of the pandemic.

All faculty and students are enrolled with their respective courses. They upload reading resources, assignments, and self study materials for enhancing learning process. A special course for internal faculty development, SBCE MOODLE-Getting Started, was designed and offered to Institute's faculty as it prepares for the scenario of online teaching in the face of continuing disruption of campus life on account of the COVID19 pandemic. Faculty use software such as SPSS, , Mendeley, Grammarly, Turnitin for various purposes of teaching, learning and research. The Library provides access to over variousonline journals and different databases. . All faculty and students use these database for teaching and learning process.

File Description	Documents
Upload any additional information	No File Uploaded
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	No File Uploaded

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

91

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	No File Uploaded
Circulars pertaining to assigning mentors to mentees	No File Uploaded
Mentor/mentee ratio	No File Uploaded

2.4 - Teacher Profile and Quality

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

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	No File Uploaded
List of the faculty members authenticated by the Head of HEI	No File Uploaded

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

14

File Description	Documents
Any additional information	No File Uploaded
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)	<u>View File</u>

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

16

File Description	Documents
Any additional information	No File Uploaded
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<u>View File</u>

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 institution continuously monitors the changes that are happening at the university level and makes appropriate & effective changes in the internal evaluation system with each scheme change for UG programs and the same procedure is adopted for PG programs. All the changes are informed to the students through interactions & circulars with utmost transparency

Continuous Semester Evaluation

- Two series tests and one model examination in theory courses and one model examination in case of practical are conducted in each semester.
- The department will carry out internal assessment on all subjects based on internal test performance and evaluation of assignments of the students.
- Continuous evaluation procedure is followed for practical courses. Internal assessment is based on continuous evaluation marks and end semester model examination marks as stipulated by APJ Abdul Kalam Technological University.
- Effective implementation of evaluation reforms of the university are strictly followed and the own initiatives of the institution are ensured by strict compliance of process and procedure suggested by the university.

The Institute has taken the following measures for the effective implementation of the evaluation reforms introduced by the University:

- The Institute has exam cell coordinators from each department for the smooth conduct of examinations.
- The examination committee meets periodically to discuss all the examination related matters.
- At Institute level, effective implementation of tutorials and internal tests takes place.
- The students can see their evaluated answer sheets and discuss the same with concerned faculty. Internal tests , based on the university syllabus are in the form of questions of graded nature.
- All the evaluation data are collected and stored in digital format for recovery/reference purpose.
- Comprehensive Viva and oral exams are conducted by relevant academicians and industry personal. Practical examinations are conducted based on the syllabus prescribed by the APJA-KTU.
- For smooth conduct of University theory examination, an

internal squad comprising of senior faculty members are appointed.

• The faculty publishes attendance and marks of the students periodically.

The Institute sends its faculty members to the CV Camps as examiners to evaluate semester examination answer scripts.

• The regulations, and syllabi of all the programmes offered by the Institute are available in the Institute and affiliated University website.

During the Induction program the newly admitted students are updated about the attendance and pass mark requirements and the grading systems for the internal and university examinations. Whenever the students are in doubt, they are encouraged to clarify them by discussing with the teachers.

File Description	Documents
Any additional information	No File Uploaded
Link for additional information	Nil

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

The Central Examination Cell is supervised by a faculty member chosen by the authorities. Institute carefully adheres to the affiliating University's norms at the time of conducting Internal Tests and Semester Exams, All CA and ESE marks for Theory, Practical and Sessional are uploaded into the University portal and students can access them by logging in their own login ids. After publicationof the results, a student can apply for Scrutiny .Viva-voce and lab copy evaluations are explained in front of students to keep the process transparent and minimize grievances. Project Seminars are held in Google Meet/Seminar Halls in front of the entire class ensure complete transparency in internal assessment

The Examination Cell, in close collaboration with the University, deals with any student grievances regarding Admit Cards, Registration Cards, etc. Any exam malpractice is reported to the Examination Cell and dealt with as per University guidelines. The IUniversity appoints observer during end semster exams and he has the right to reoprt malpractices through online mode.If the student cannot substantiate his case to the satisfaction of the Committee, he has to repeat the examination the next semester

File Description	Documents
Any additional information	No File Uploaded
Link for additional information	<u>https://sbce.ac.in/academics/internal-</u> <u>quality-assurance-cell-iqac/</u>

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.

Institute follows the outcome-based education following Bloom's Taxonomy guidelines of NBA.

PSOs are identified after detailed deliberation with the stakeholders and are placed at prominent places including the labs and offices. The College is following the COs as specified by MAKAUT, in case the COs is not specified by the university, NBA guidelines are followed

The POS, PSOS, and COS are disseminated through Institute Website, Prospectus, Course file, Departments, Laboratories, etc. As a part of the Induction Programme, Institute apprise about POS, PSOS, and COS, and other academic details to the fresh batch of students of respective academic programs. Each Course Outcome is mapped to Program Outcomes in terms of relevance. Three levels of relevance are based on the degreeof correlation i.e. 1 for low, 2 for medium, and 3 for high correlation. The contribution of course to each PO is expressed in terms of the average relevance of COs mapped to that particular PO. Similarly, the value computed for all the courses including first-year courses is entered for the corresponding PO and PSOs. The agreed-upon COs form the basis for achieving POs and PSOs and thus contributing towards achieving the Mission and Vision of the Institute.

File Description	Documents	
Upload any additional information	No File Uploaded	
Paste link for Additional information	https://sbce.ac.in/academics/internal- quality-assurance-cell-iqac/	
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 efficiency and effectiveness of the process of attainment of POs and COs is monitored, assessed, and improved by taking inputs from the discussion/suggestion/decision taken in the meetings of the Department Academic Council, Academic Council, and IQAC Cell.		
The following method is used to assess course outcomes. Course attainment levels are defined based on prior performance andare expressed as a proportion of students achieving a target score. Theory subjects: 1. Internal Evaluation (weightage 30%)		
Continuous internal assessment		
1. External Evaluation (weightage 70%)		
University theory examination		
Practical Subjects:		
1. Internal Evaluation (weightage 50%)		
Lab performance		
Practical continuous assessment		
1. External Evaluation (weightage 50%)		
University practical examination		
Each CO has a target level and is achieved if the attainment is equal to or exceeds the target. Once the total attainment of CO is calculated, it is used for measuring the level of attainment of POs and PSOs.		

Direct Attainment (80% weightage) and Indirect attainment (20% weightage).

Direct attainment is calculated from CO attainment based on four Continuous Assessments and Semester Examination and Indirect attainment is calculated based on 25% Program Exit Survey + 50% Alumni survey + 25% Employer Survey

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for Additional information	<u>https://sbce.ac.in/academics/internal-</u> <u>quality-assurance-cell-iqac/</u>

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

221

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for the annual report	https://sbce.ac.in/academics/internal- quality-assurance-cell-iqac/

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://sbce.ac.in/academics/internal-quality-assurance-cell-iqac/

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)

4,46,000

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

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

9	
File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	<u>View File</u>

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 nongovernment agencies during the year

File Description	Documents
List of research projects and funding details (Data Template)	<u>View File</u>
Any additional information	No File Uploaded
Supporting document from Funding Agency	<u>View File</u>
Paste link to funding agency website	https://kscste.kerala.gov.in

3.2 - Innovation Ecosystem

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

The Institute was approved as IEDC/Startup Boot camp under Kerala Startup Mission in August 2015. There is an extended service named Sree Buddha Incubation Facility, where pre-incubated start-ups can utilize the facilities for product development. The Entrepreneurship Development Cellprovides opportunity for students to present their innovative ideas in various idea pitching contests.

An innovative effort of an institution helps in its academic excellence. An innovative practice could be a pathway created to further the interest of the student and the institution, for internal quality assurance, inclusive practices and stakeholder relationships. The teacher uses multimedia to modify the contents of the course material. It helps him/her to represent in a more meaningful way, using different media elements. To make teaching learning process effective, easier and meaningful, the institution has been practicing innovative teaching techniques. Conventional teaching has been made more effective by using ICTs. Using modern tools have helped substantially the students towards participatory learning and acquainting themselves with new innovative teaching learning process. 1) Efforts by the faculty: a) Faculty makes use of models, graphs, power point presentation to present the content in the syllabus. b) Faculty prepares well-structured lesson plans for the subjects allotted which are made available to the students at the starting of the semester. c) Faculty provides collaborative learning, peer to peer learning and active learning environment. d) Interface between the institution, industry and academia encouraged. e) The blooms taxonomy is applied in lesson planning and delivery. f) Organizing competitions for students such as quiz, debate, group discussion, debugging, idea presentation, etc. g) Assignments are prepared by the faculty in all the subjects and students are asked to prepare the solutions. h) Encouraging handson session for teaching programming languages. i) Each department have separate project laboratory to provide the students to carry out project works. This will enhance the in-house projects of the institute.

The notion of innovation ecosystems is given great significance in the college. The institution takes every possible step to inculcate the spirit and culture of research amongst faculty and students. The institution views the concept of innovation

ecosystem in the light of its required potential and in a manner to curb any limitations, offering transparency and equity. The motto of the college is to bring forth innovations through advanced technologies. The college motivates students to attend conferences, seminars, webinars and workshops to enable knowledge transfer on emerging technology areas. College has a well formed central library which contains print journals, e-journals and other online resources. College also arranges industrial visits and study tours to impart subject knowledge to the students. All the departments in the college encourage UG and PG students to take up minor and major research projects from various funding agencies. Sree Buddha College of Engineering was approved as IEDC/Startup Boot camp under Kerala Startup Mission in August 2015. The objective of IEDC is to apply institutional mechanism to develop Entrepreneurial culture among the students. The college has a dedicated space for students to work after college hours to improve their technical skills. The space includes Computer systems, internet facility and space for discussion. There is an extended facility named Sree Buddha Incubation Facility where pre incubated start-ups can utilize the space for product development. The Entrepreneurship Development Center provides opportunity for students to present their innovative ideas in various idea pitching contests. The students are given opportunities to interact with different entrepreneurs. IEDC provides a platform for industry-academia interaction for the innovative youth to know the essence of entrepreneurship. The continued efforts have resulted in our students proving their mettle in various state level platforms.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://sbce.ac.in/iedcinnovation-and- entrepreneurship-cell/

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

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)	<u>View File</u>

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	<pre>https://sbce.ac.in/research/research- council/</pre>
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	No File Uploaded
Any additional information	<u>View File</u>

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

14

File Description	Documents
Any additional information	No File Uploaded
List of research papers by title, author, department, name and year of publication (Data Template)	<u>View File</u>

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

81

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

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

National Service Scheme (NSS), a voluntary program in which young people from Universities and Colleges work for creating a campuscommunity linkage for Socio-economic development.Sree Buddha College of Engineering, Pattoor, have two NSS units. Several blood donation camps and free ophthalmology camps, e-waste collection and disposal, traffic awareness programs and poster presentation of various activities were conducted by NSS.

All the departments in the college has extension activity cell which ensures the active participation of students from PG and UG level in its various endeavors. The departments select the volunteers from all the semesters and provide an opportunity to participate in extension activities. College organizes various extension activities to focus on social issues and to promote engineering awareness. The college has a strong NSS unit which is actively involved in social issues.

File Description	Documents
Paste link for additional information	<u>https://sbce.ac.in/nss/nss-</u> <u>february-03-2015/</u>
Upload any additional information	<u>View File</u>

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

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

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

21

File Description	Documents
Reports of the event organized	No File Uploaded
Any additional information	No File Uploaded
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	<u>View File</u>

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

File Description	Documents
Report of the event	No File Uploaded
Any additional information	No File Uploaded
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

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

1

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

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

14

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	<u>View File</u>
Any additional information	No File Uploaded
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	<u>View File</u>

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 institution is located over an area of 29.29 acres with five distinct blocks -Mahatma Gandhi Block, Sarvepalli Radhakrishnan Block, Jawaharlal Nehru Block, Homi J Bhabha Block and M

Visvesvaraya Block. Three of these blocks are purely standalone blocks which include Department of Civil Engineering (Javaharlal Nehru Block), Department of Computer Science Engineering (Homi J Bhabha Block) and Library (Sarvepalli Radhakrishnan Block), while other two blocks are used on a sharing basis, in which Mahatma Gandhi Block is shared by Departments of Biotechnology and Biochemical Engineering and Electronics and communication engineering and M Visvesvaraya Block is shared by Departments of Mechanical Engineering and Electrical and Electronics Engineering respectively. These blocks contribute to an imperative infrastructure required for effective teaching-learning process in the form of Classrooms, Seminar halls, Laboratories, Workshops and Research space. Available facility details: - The class rooms, laboratories and seminar halls of the institution are as per the norms to facilitate academic activities. Every department is provided with ICT enabled class rooms and a separate departmental library. Classrooms: The institution is equipped with wellfurnished, well ventilated and spacious classrooms for conducting theory classes. Technology enabled learning rooms: Each classroom has LCD projector, Wi-Fi enabled internet connectivity and a seating capacity of 60. Each class is provided with a public addressing system to facilitate clear listening of announcements made from reception and principal's office. The classrooms are also fitted with surveillance camera for security and monitoring purpose. Seminar Halls: The institute has a well-designed centralized seminar hall located in Sarvepalli Radhakrishnan Block. This seminar hall is fully air-conditioned and has a seating capacity of 200 people. Equipped with LCD projectors, whiteboard and public addressing system, this becomes the key venue for organizing conferences, workshops, conclaves and FDPs for students and faculty. Separate seminar halls are also available at individual departments with an average seating capacity of 70 people. Laboratories and workshops: The laboratories of every department are well equipped and well maintained for carrying out curriculum-oriented practice sessions and projects. Computing facility: There are around 652 computers available in the institution. These are updated on a regular basis depending on the need for computation. Sophisticated software like Matlab, ANSYS, SOLIDWORKS®, AutoCAD etc are available. A campuswide Wi-Fi network with an internet speed of 100 Mbps is also available. In addition to this, the institute has a Central Library that holds a large volume of books, magazines and newsletters along with a large number of National and International journals. The library is also equipped with a Digital Library which becomes an added advantage for the students and staff members as they can access NPTEL lectures and IEEE

Explorer for study and research purposes.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	<u>https://sbce.ac.in/academics/internal-</u> <u>quality-assurance-cell-iqac/</u>

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

Sports and Games:

FootBall Court is situated on the Northern side of the College and spread over an area of 6 .5 acres. The length of the court is 80m and the width is 50m. A cricket field is also included on the main ground. A separate concrete net pitch is situated in the eastern side of the college for practicing with a specification of 30m length, 15m width and 20m Height. A Kabaddi court is situated in the Northern side of the campus. Basket ball court is situated in the southern side of the campus. An indoor court situated in the eastern side of the campus with a specification of 40m length, 30m width, and 25m height. Two shuttles Badminton courts are available in the indoot court. This court is used for practicing Yoga, Table tennis, Chess and Carroms. There is also availability of 2 Volley ball courts near the main ground which students can access for practicing.Coaching is given to almost all the games wih the help of permanent well experienced Physical education director. The college sports council consisting of President (Principal), teachers nominated by the principal, college sports secretary and captains of various college teams controls the sports and games activities of the college.

Details of Sports and Games Facilities Available in the campus

1 Football ground 4000 sq.m 1

- 2 Volleyball 600 sq.m
- 3 Cricket 5850 sq.m 1
- 4 Basketball 420 sq.m 1
- 5 Shuttle badminton Indoor 2

6 Shuttle badminton Outdoor 1

7 Chess Indoor 5

8 Caroms Indoor 5

Cultural Activities:

For cultural activities the college is provided with an auditorium (Ashoka Auditorium). This auditorium annually becomes a venue for 3 day techfest, two days Arts Day celebration and along with this it also becomes a venue for various NSS programmes and departmental activities.

Gymnasium:

A state of the art gymnasium is available with a full time trainer for faculty and students with all fitness equipment.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	<u>https://sbce.ac.in/facilities/other-</u> <u>facilities/</u>

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

52

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	<u>https://sbce.ac.in/wp-</u> <u>content/uploads/2019/07/ICTFACILITIES.mp4</u>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

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)

115.68

File Description	Documents
Upload any additional information	No File Uploaded
Upload audited utilization statements	No File Uploaded
Upload Details of budget allocation, excluding salary during the year (Data Template	<u>View File</u>

4.2 - Library as a Learning Resource

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

ABOUT THE LIBRARY

The artistically designed library with more than 40000 volumes, plenty of audio- visual materials and national & international journals, is indeed a rich repository of knowledge facilitating prospects for future research. The Library building is completely air-conditioned with a seating capacity of about 300 students. A separate enclave is provided for research students. In addition, a reading room facility is also provided for the convenience of students. The Library is being managed with a fully integrated multi user Library Management Software. Using this software, cataloguing as well as circulation services have been fully automated. A digital library is also maintained. It is an online archive of useful software, books and tutorials. Students can download any permitted software from this resource. There are many textbooks and reference books available in the digital format as well. Many lectures have also been recorded and are available online for students' use. Most courses maintain an intranet site containing lecture slides and other course material. The library has an excellent digital library system in place with access to 4 electronic databases, which include more than 2922 e-journals and e- books like IEI Springerlink, NDL, DELNET NPTEL Videos with multi user accessibility. The library is an institutional member of DELNET (Developing Library Network), NDL(National Digital Library of India), IEI (The Institution of Engineers(India).

Notably library have displayed step by step user guide on remote
login to get access to the licensed E-resources. User has to authenticate using their institutional Email ID and password or they may access the resources using common ID provided for COVID-19 crisis period.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	<u>https://sbce.ac.in/facilities/central-</u> <u>library/</u>

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

File Description	Documents
Upload any additional information	No File Uploaded
Details of subscriptions like e- journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<u>View File</u>

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/ejournals during the year (INR in Lakhs)

135221

File Description	Documents
Any additional information	No File Uploaded
Audited statements of accounts	No File Uploaded
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

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

15

File Description	Documents
Any additional information	<u>View File</u>
Details of library usage by teachers and students	<u>View File</u>

4.3 - IT Infrastructure

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

College has latest IT Infrastructure to support the teaching & learning processes. The campus has been enabled with Internet bandwidth services on 24X7 support, providing anytime anywhere access to knowledge and learning resources. Extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students. The college gives advanced library web broadband office for arrangement of showing and learning materials. The college campus and hostel is Wi-Fi enabled with a Internet broadband speed of 100Mbps ILL 1.4 since 30/4/2019 and 40Mbps NMEICT since 5/1/2019.There are six access points located in main block,three in libraray block,one in civil block,two in computer science block and two in mechanical block for smooth provision of Internet within the campus. Details of College computing facilities i.e., hardware and software are as follows:

Hardware

Number of systems with individual configurations Desktop (Intel i3 , Dual Core, Celeron Processor with 2-4 GB RAM and 250 GB to 500 GB HDD) Laptop (Core2duo 2.4 Ghz/i3-4030U 1.90 GHZ,i5-5200U, 2 GB to 4 GB RAM, 250 GB to 500 GB HDD) Total number of systems-652 Total number of printers-49 There are fully equipped computer labs College has an IT maintenance cell, which looks after maintenance of computer and its peripherals along with software updations on a regular basis. This committee monitors policies concerning issue of LCD projector, laptops to students and faculty, and also of printing facilities availed by the students and staff (faculty and nonteaching). There is a website coordinator who ensures the updations of college website with every recent activity of the campus. The Classrooms, seminar halls, and conference halls, are equipped with LCD Projectors with all accessories.There is a survelliance facility installed in various places including classrooms inside the campus. The monitoring system is placed in IT maintenance cell and also connected to principal room. The Information Technology maintainance cell looks upon the monitoring and records of the system.

LAN facility

The campus is facilitated with a LAN having a speed of 1000Mbps.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://sbce.ac.in/facilities/internet- lab/

4.3.2 - Number of Computers

326

File Description	Documents
Upload any additional information	<u>View File</u>
List of Computers	<u>View File</u>

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

File Description	Documents
Upload any additional Information	No File Uploaded
Details of available bandwidth of internet connection in the Institution	<u>View File</u>

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)

14.27

File Description	Documents
Upload any additional information	No File Uploaded
Audited statements of accounts	No File Uploaded
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<u>View File</u>

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 college has appointed housekeeping and technical staff members for day-to-day upkeep of the premises. SBCE has service providers for maintenance of buildings, equipment, vehicles, computers etc. All electrical and electronics equipment are looked after by the team of electrical maintenance staff consisting of electrician and lab staffs. Routine computer maintenance, software installations, networking are handled by the ITS (Information Technology services) cell. Anti-virus software is purchased/renewed annually for the smooth working of all the computers in the institute. The Institute has full time technical staff like plumber, electrician and other technicians who regularly examine the vital instruments. For steady water supply, there are multiple wells available in the campus. For clean drinking water supply Aqua guard water purifiers are installed in various blocks. Electrical Maintenance Preventive maintenance technique is adopted for maintenance of electrical appliances. The electricians ensure that the fans, lights etc. in the campus are in working condition and all complaints regarding the above are swiftly resolved. Infrastructure Maintenance Maintenance and utilization of the college physical facilities are carried out under the leadership of PRO. For maintenance of a clean campus environment; Grade IV staffs are assigned to various duties. Cleaning of classrooms, corridors, faculty room, toilets, office, library, college compound etc. are done on regular basis. Skilled workers are hired for repair works related to buildings, furniture, etc. Classrooms The class room is mopped every day for smooth conduct of classes by the cleaning staff. In case of any damage to the projector or Internet, the class mentor brings it to the notice of the Administration for necessary follow up action. Laboratory Sree Buddha College of Engineering provides annual budget allocation to maintain the existing facilities in the laboratories of all departments. Necessary equipment and materials are procured before commencement of the academic year, a meeting

is conducted and a report on the requirement of new equipment, replacement of old equipment and modernization of machines/software is prepared along with requirement of consumables and non-consumables to conduct experiments as per the university guidelines. Stock registers, log books are maintained by the respective laboratories to report entries and defects arising for rectification. All major repairs are identified and external expertise sought for maintenance of equipment wherever necessary. Library The librarian regularly monitors the library to ensure and maintain all text books, reference books, articles, competitive examination books, magazines, journals, emagazines, e-books and e-journals. Regular swabbing of the library floors, regular cleaning of the racks, up keeping the quality of the books with needed binding are in place. Maintenance of Campus The college campus has a large parking area in front of the college. The parking space for staff vehicles is provided in each block. The college has a hygienic canteen serving delicious and nutritious food at a subsidized rate. Cleaning of the campus areas including the academic and administrative buildings is performed daily in the morning before the regular classes by the housekeeping team. The whole campus area is maintained by the housekeeping supervisor who reports the completion of work to the Public Relations Officer. Liquid Waste Management The liquid waste generated from various laboratories, workshops, sanitary facilities and wash offs are being treated as per standard procedures. Liquid wastes which contain hazardous chemicals are collected, pooled and discarded after neutralization or detoxification process. Biological wastes are treated through septic tanks. The rain water wash offs are used for well recharging and the rest is released to the nearby wet land. Sports Sree Buddha College of Engineering College maintains sports facilities for indoor games and outdoor sports. The institution has well-maintained infrastructure for sports like cricket, basketball, volleyball, football and badminton. Physical Education faculty of the college handles the matters related to sports. The college has a well-equipped fitness center which is also maintained by the Physical Education faculty. Computers The computer systems and other sensitive equipment (servers, Projectors, Printers, Scanners, Xerox machines, Bio-metric machines) are provided with UPS systems to avoid any damage during power outages.

For Computer Laboratories (Maintenance)

Preventive maintenance and breakdown maintenance procedure is followed so as to ensure maximum availability of the systems in

the lab. Installation of antivirus and firewall ensures that the software and system is secured. Breakdown maintenance wherein the system fails due to SMPS problem or boot failure is recorded in a register. If the problem is minor, the technical support staff of the lab will rectify it. For major failures, support from vendor is taken. Periodic maintenance is done by regular cleaning of the lab spaces, software updates and antivirus updates.

Maintenance of Electrical and Electronic equipment:-

Regular checkup of equipment is carried out at the end of every semester. Breakdown register is maintained in the laboratories. As per the requirement, minor repairs are carried out by the lab assistant or faculty member.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	<u>https://sbce.ac.in/wp-</u> content/uploads/2019/07/4.4.2.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

171

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<u>View File</u>
Upload any additional information	No File Uploaded
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	No File Uploaded

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

11

File Description	Documents
Upload any additional information	No File Uploaded
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<u>View File</u>
5.1.3 - Capacity building and sk enhancement initiatives taken k institution include the following Language and communication s skills (Yoga, physical fitness, he hygiene) ICT/computing skills	by the g: Soft skills skills Life

File Description	Documents
Link to Institutional website	Nil
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

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

137

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

137

File Description	Documents		
Any additional information	No File Uploaded		
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	No File Uploaded		
5.1.5 - The Institution has a tra mechanism for timely redressal grievances including sexual har ragging cases Implementation of statutory/regulatory bodies Org wide awareness and undertakin with zero tolerance Mechanism submission of online/offline stu- grievances Timely redressal of through appropriate committee	l of student cassment and of guidelines of ganization ngs on policies is for dents' the grievances		
File Description	Documents		
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	No File Uploaded		
Upload any additional information	No File Uploaded		
Details of student grievances including sexual harassment and ragging cases	No File Uploaded		
5.2 - Student Progression	5.2 - Student Progression		
5.2.1 - Number of placement of	5.2.1 - Number of placement of outgoing students during the year		
5.2.1.1 - Number of outgoing students placed during the year			
148			

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

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

11

File Description	Documents
Upload supporting data for student/alumni	No File Uploaded
Any additional information	No File Uploaded
Details of student progression to higher education	<u>View File</u>

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

0

File Description	Documents
Upload supporting data for the same	No File Uploaded
Any additional information	No File Uploaded
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	No File Uploaded

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.

2

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

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

• A Student Affairs Council (SAC) is constituted with representatives from teaching faculty and student community. College Principal acts as the exofficio president of the SAC and he nominates one coordinator and three cocoordinators from the teaching fraternity. In addition to this, there are faculty representatives from all departments nominated by respective HoDs. After the onset of academic year, two students (preferably a male student and a female student with no arrear papers) are elected from each class under the supervision of class advisors. These student representatives would further elect the SAC office bearers in presidential election mode. Chairman, Vice Chairperson (female candidate is preferred), General Secretary, University Union Councilors (2 No.), College Magazine Editor (from pre-final year class), Arts Club Secretary, Sports Secretary, Lady Representative and Representatives for each year are the various student positions in SAC. The SAC meeting is conducted in regular intervals to plan various programmes and to address students' grievances. • As part of the university curriculum, during the beginning and end of each semester a separate class committee and course committee is conducted to discuss the academic related matters. The class committee consists of the HoD, One senior faculty as chairman, course faculties, class advisors and student representatives. The committee will meet thrice in every semester

to follow up the academic work. Course committee will also be met thrice in every semester to discuss the course progress and course of action for a course common to different branches. It consist of one senior faculty as chairman, course faculties and student representatives.

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

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

12

File Description	Documents
Report of the event	<u>View File</u>
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)	<u>View File</u>

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

Yes, Since SBCE opened its doors in 2002, over 1400 students have become Engineering graduates. SBCE Alumni association was formed in 2006 as a platform to strengthen the bond between alumni members. Annual meetings are conducted every year to renew their friendship, interact with the younger generation of SBCE and experience the transformed campus environment with nostalgic memories. Executive Body of Alumni association consists of Ex-Officio President as Principal, Secretary as a Faculty (Mrs. Gayathiri . Asst. Professor, EEE), Treasurer: Mr. Pradeep Kumar, B. 4 Lakhs - 5Lakhs

Placement officer.

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

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

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

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

Our governance body is so reflective and the prime focus is on the vision and mission of the institute.

VISION

• To create professionally competent Engineers with human values and social commitment.

MISSION

- Offer well balanced curriculum with student-centric approach.
- Encourage students to participate in innovation, lifelong learning and research.
- Impart ethical and human values focusing on rural needs and sustainability.

The following strategic characteristics and aspirations enable the College to realize its vision:

- Modern and precise educational experiences that develop the engineers
- An atmosphere that facilitates personal commitment to the educational success of students in an environment that

values multiplicity and society

- Education and research partnerships with Universities, colleges and industries
- Highly successful alumni who contribute to the profession in the global society
- Undergraduate and Postgraduate programs that integrate global awareness, communication skills, and team building across the curriculum
- Practical and responsible resource management;
- Training that prepares students for interdisciplinary engineering research and advanced problem solving
- Leadership and service to meet social needs.

Every year management designs and executes Short-term, Long-term plans integrating departmental plans and Principal's and stake holder's recommendations. The policy and planning are carried out according to consultation with stakeholders. Top management with the help of the academic council formulates quality policy and integrates the same in the strategic plan. Formulation of action plans and defining the policy objectives attempts to address the issues of systematic change in providing quality education. All the systems work together as a team aiming to be champions of organizational change. The Departments foster a healthy competitive atmosphere among themselves and each one strives to accomplish excellence in their standards.

File Description	Documents
Paste link for additional information	www.sbce.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.

The College follows the policy of decentralization. The Management delegates all the academic and non-academic decisions based on policy to the college council headed by the Principal. The college council formulates common working procedures and entrusts the implementation through departments. The HoDs and the department coordinators manage the day-to-day activities of the department and keep a track of co-curricular and extra-curricular activities in the College. Other units of the college like sports, arts, library, NSS, IEDC, etc. have operational autonomy under the guidance of the various committees/clubs/associations, and

students are involved from various departments in the decisionmaking process.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

The college management gives liberal freedom and tractability to the Principal together with the academic council and different committees to lead all the academic activities of the College. They regularly meet and take necessary steps to formulate and implement strategic plans of the institution. Mentorship is introduced in all the departments and it is commendably supervised by the Principal .They invite suggestions from senior staff and to study the impulses of the institute in general and take steps for further improvements as far as they are within the capacity and recommend the management for modifications.

The following strategies are adopted by the institution to monitor and evaluate policies:

- Regular meetings of the Councils (Managing Council, Academic council and IQAC)
- The feedback system (Regular feedback from Stake holders, Alumni Members, Staff and Students)
- Periodical Academic Audit Team visits to the departments (At the end of a Semester).
- Regular visits of the Principal to the departments and interaction with heads of the departments
- Heads of the departments monitor the system of each department regularly and conducts regular staff meetings.
- Annual submission by each Department HODs regarding their activities.

Quality improvement strategies adopted by the institution for each of the following:

- Curriculum Development
- The college follows the curriculum and syllabus prescribed

by the University for all its courses.

- Affiliated Institutions are not allowed to design their own curriculum. Rather, after every 5 years, University revise their syllabus and Senior faculty members fromcollege have been a part of the curriculum development committee formulated by university and have contributed to curriculum development.
- The academic calendar of the University and college which is published in website helps in planning the academic year ahead.
- Teaching plans in each subject ensures the completion of curricula and timely conduct of internal exams.
- Departments offer certificate/value-added courses to equip the students with the changing employability requirements.
- Regular feedback from students helps in effective curriculum deployment.
- Follows Tutorial Book System
- Carrying out semester wise Mini / Micro projects.
- Industrial visits are made part of the curricular activities in all semesters to provide awareness about the industrial processes and also make the students understand the needs of the industry- vis-a-vis the academic process.
- Teaching and Learning
- Teachers are given the freedom to choose the most effective method for transferring the curriculum to students.
- Traditional classroom methods as well as ICT based teaching with smart boards and projectors is employed.
- Orientation and bridge courses are organized for First year UG students to help them to shift to Higher Education mode.
- Regular monitoring of class helps to identify slow, medium and advanced learners and improvement facility is provided

for each category through remedial classes, peer and cross teaching.

- Students are provided with updated lab manuals for the respective lab sessions. The manual contains detailed explanations, significance and possible viva questions for their ready reference.
- Library has a large collection of books, journals and other e-resources which are being regularly updated.
- Newly admitted students are given an orientation on the effective use of library
- Students are taken to different industries relevant to their domain to understand industrial developments and requirements for a minimum of two visits per year.
- In advisory system, each faculty member is entrusted with the task of mentoring 20 students. This has paved way for strengthening the bond of trust and affection between teachers and students.

• Examination and Evaluation

- The Controller of Examinations of the college facilitates and ensures the smooth conduct of series examinations and University examinations of UG and PG in accordance with university guidelines.
- For effective monitoring of academics and examinations, all the class rooms are equipped with CCTV cameras.
- The College Council entrust teachers with question paper setting, conduct of exam, evaluation of answer scripts, assess learning outcome with students and take remedial measures, preparation of progress report and conduct of Parent Teacher meeting.
- Attendance of the students, marks obtained in internal exams and assignments/viva/seminars are displayed and any grievance from students is dealt with immediately. These data are utilized for the continuous evaluation of the students.

- Faculties prepare university question papers/ bank, invigilate university exams and act as chairpersons and examiners in centralizedvaluation of regular exams.
- There are internal and external evaluation of practical courses and viva as per curricula.
- Grievance redressal committee of the college ensures a fool proof, effective and student friendly examination and evaluation process.
- Research and Development
- The College encourages research among both faculty and students.
- The IQAC through the research committee of the college disseminates necessary information regarding funds and projects that can be availed for research and conducting seminars, workshops etc.
- Faculty members are encouraged to apply for funded projects of AICTE, KSCSTE, CERD (KTU), DST etc.
- Faculties do research and also apply for research guide ship. They are encouraged to participate and present papers in seminars and research journals and to conduct major/ minor research projects
- Faculty members are deputed to participate in workshops, seminars, and conferences in both national and international repute.
- Experts from Industries, Research Organizations and Academic Institutions are invited to deliver lectures on latest trends.
- The students are encouraged to take up projects that imbibe in them a research culture and social commitment.??????
- Each student in PG studies is attached to a faculty as a part of research, and their findings are published in journals and conference proceedings.
- Financial Assistance are provided by management to faculty for publishing technical papers in indexed journals
- In-house management funding for quality research projects
- Faculty will be granted leave for doing PhD.

- Library, ICT and Physical Infrastructure / Instrumentation
- The central library has a large collection of books, journals and other resources which are regularly updated. The count of books is 34429 of which 202 books were added in 2019-20.
- The digital library has a vast collection of e-books which are renewed and updated yearly.
- Library is having computer terminals for searching content online. Besides this, regular e-mail has been sent to faculty to upgrade them with the latest information of library.
- Each department has a department library with good collection of books and other reference materials
- Most of the classrooms are equipped with projector and smart boards. Every department has a mobile projector which can be used in any classroom.
- New equipment are added to department laboratories. All the equipments are well maintained and calibrated for accurate results.
- The ICT facility includes smart class rooms, Wi-Fi connected departments, and LAN connected computer centers/labs, Language labs, Seminar halls, Digital display board etc.
- College administration council takes effective strategies for the efficient utilization of the available resources and for proper maintenance of the facilities.
- Human Resource Management
- College administrative council takes decision on the day-today running of the college with support from teaching, nonteaching and office staffs thus ensuring an effective human resource management.
- College is partnered with ICT academy for conducting training programmes for students and staff.
- SBCE is a remote centre for carrying out workshops and faculty development programmes under NMEICT organized with support from various IITs.
- In addition to advisory and academic duties, faculty members also act as coordinators of various college committees and student support clubs and activities.
- Contingency and other support staffs are employed as and when required.
- The Students Union elected through parliamentary method enables a sense of responsibility among the student community and works in an effective way for the success of

the college.

- The students are encouraged to initiate and conduct different activities and are given opportunities to explore new ventures.
- Welfare measures like maternity leaves, half pay leave, transportation facility, staff quarters, Special study leave for PhD are granted to teaching and non teaching staff.
- Biometric, CCTV facilityare used for human resource management.
- Industry Interaction / Collaboration
 - We have a robust placement cell which collaborates with approximately 30 renowned companies every year and ensures rewarding placement for the students.
 - IQAC takes initiative in identifying possible collaboration opportunities and encourage the departments in collaborating with other institutions to introduce the students to global market and acquire and enhance skills required for employment.
 - Departments have MoU with various Industries, Institutions and Cooperate Offices helping the students to get an exposure and experience.
 - Linkages are created with different colleges, Universities and other places of importance so that our faculty and students get to use their resources and infrastructure.
 - These collaborations help in student and faculty exchange, field trips, industrial visits, on-jobtraining, intern-ship, project work and research.
 - Seminars and talks with entrepreneurs, persons from industry, co-operate houses, health workers, other eminent personalities from respective fields, etc. are conducted regularly and give students an opportunity to interact with them thus broadening their horizon.
 - Collaboration with Industries:
 - MAKS Automations(P) Ltd , Ezhukone, Kollam, Kerala

Annual Quality Assurance Report of SREE BUDDHA COLLEGE OF ENGINEERING, PATTOOR

- Navagriha Constructions Kollam, Kerala
- Geostructurals (P) Ltd, Cochin, Kerala
- K. Lekshmanan & Co, Kollam, Kerala
- Logix Space Technologies Private Ltd, Kochi, Kerala
- Crypt4bits Private Ltd, Kochi, Kerala
- Zero-pi technology Private Ltd, Trivandrum, Kerala
- Exacore IT Solutions Pvt. Ltd, Ernakulam, Kerala
- Technology Collaborations:
- Department of Nano Technology, Noorul Islam Centre for Higher Education, Thuckalay, Kanyakumari District, Tamil Nadu
- Department of Mechanical Engineering, Noorul Islam Centre for Higher Education, Thuckalay, Kanyakumari District, TN.
- Department of Automobile Engineering, Noorul Islam Centre for Higher Education, Thuckalay, Kanyakumari District, TN
- National Highway Authority of India
- Students and Faculty Internships:
- IIIC Kollam, Kerala
- Sarathy Autocars, Kollam, Kerala
- Logix Space Technologies Private Ltd, Kochi, Kerala
- Crypt4bits Private Ltd, Kochi, Kerala
- Zero-pi technology Private Ltd, Trivandrum, Kerala
- Exacore IT Solutions Pvt. Ltd, Ernakulam, Kerala

- Admission of Students
- The seats are filled up according to the norms prescribed by the Government of Kerala and AICTE
- Community and Management quota admission are conducted by the management following university guidelines.
- Principal assisted by administrative staffs and faculties coordinators conduct the admission process in campus.

File Description	Documents
Strategic Plan and deployment documents on the website	No File Uploaded
Paste link for additional information	Nil
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.

Patron is the Chairman of the Sree Buddha Management Society. The Management council is responsible for Policy making and to verifying the reports through the Chairman, Secretary & Treasurer. The decision making procedures are made at appropriate levels in the organizational hierarchy. Statutory bodies such as IQAC, Antiragging Cell, Discipline committee etc., as per the university/government guidelines are also included in the organizational structure of the institution. A committee comprising of faculty members and administrative staff are involved in the planning and implementation, academic audit and evaluation. There are different bodies that give academic and administrative leadership to the institution. An optimum level of decentralization through the autonomous departmental system and participative decision making process are in practice.

Service Rules:

The institution strictly follows the service rules according to the AICTE norms. The institution runs for 7 hours: 9.00 am to 4.00 pm. The teaching faculties have the benefit of Casual Leaves, Half pay Leaves and Maternity leaves etc. and the non-teaching faculty have the benefits of PF, ESI etc. in addition to the above. Recruitment of faculty takes place according to the norms of the University, a body comprising of Chairman, Secretary, Treasurer, Principal, HOD and Subject experts decides the worthiness of the faculty member by his/her performance in the interview according to the parameters they are looking for.

Promotional policies:

The institution follows the good academic standards, provide Merit scholarships are given to the meritorious students and to those who have secured above 10/10 GPA in University exams.

Grievance Redressal Mechanism:

Once the members of the faculty, non-teaching staff or supporting staff concerning their appointments or employment raise any grievances relate:

- To matters affecting themselves as individuals
- To matters affecting their personal dealings or relationship with other staff members of the college or students
- If other remedies within the faculty, staff, department or other similar area have been exhausted, the member of the staff may raise the matter with the Head of the department or similar authority.
- If the staff member is dissatisfied with the result of approach as mentioned above or if the grievance directly concerns the HOD of the department, the staff member may directly approach the Principal for the redressal of his/her grievance.
- If the Principal feels that the grievance is trivial or invalid, he will take no action upon it. If he feels otherwise he shall inform the grievance committee and take the action accordingly.
- A woman's cell is also active in campus which looks on grievances related to girl students and woman faculties

File Description	Documents
Paste link for additional information	www.sbce.ac.in
Link to Organogram of the institution webpage	https://sbce.ac.in/wp-content/uploads/2019 /07/6.2.2-organogram.pdf
Upload any additional information	<u>View File</u>
6.2.3 - Implementation of e-gov areas of operation Administrat and Accounts Student Admissio Support Examination	ion Finance
File Description	Documents
ERP (Enterprise Resource Planning)Document	<u>View File</u>
Screen shots of user inter faces	<u>View File</u>
Any additional information	No File Uploaded
Details of implementation of e- governance in areas of operation, Administration etc(Data Template)	<u>View File</u>
6.3 - Faculty Empowerment Strategies	
6.3.1 - The institution has effective welfare measures for teaching and non- teaching staff	

Teaching staff:

- Wi-Fi connectivity
- College Conveyance
- Maternity Leave
- Encouragement for major and minor research projects
- Leave for attending Conferences / Course work
- Hostel facility for single accomodation
- Staff Quarters facility for family accomodation

- Half pay leave for personal reasons
- Institute organises workshops, FDPs, seminars and conferences.

Non Teaching Staff:

- Wi-Fi connectivity
- ESI
- Free uniform for supporting staff and security guards
- EPF facility
- Half pay leave provision
- College Conveyance
- Maternity Leave

File Description	Documents
Paste link for additional information	www.sbce.ac.in
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

2	
1.	4
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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	<u>View File</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<u>View File</u>

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

181

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)	<u>View File</u>

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

The institute has well prepared appraisal system, that documents teaching, learning and evaluation activities, co-curricular, extension and professional development activities, research and academic contributions, admin duties, and research guidance.

SBCE strictly follows the UGC Regulations on Minimum Qualifications for Appointment of Teachers and other Academic Staff in Universities and Colleges and Measures for the Maintenance of Standards in Higher Education-2010" (Regulation No. F.3-1/2009 dated June 30, 2010), together with all amendments made therein from time to time, for its teaching and non-teaching staff.

The performance of each employee is assessed annually after the completion of one year of service. The objective is not only to objectively evaluate the performance as per established norms but also to identify potential aspects for improvement that can eventually lead to further progress and growth of the employee.

The salient features of the performance appraisal system are as follows:

Teaching Faculty

a) The performance of each faculty member is assessed according to the Annual Self Appraisal System.

b) The institute undertakes a wide range of activities besides academics, for which faculty members are assigned additional

duties and responsibilities.

c) The Institute accords appropriate weightage for these contributions in their overall assessment. The teacher's performance is appraised through his/her implementation of innovative methodologies in classroom lectures, seminars, tutorials, course delivery, question paper setting and evaluation, updating of materials, etc. Besides, student feedback and pass percentage of the course are also considered. The performance of the faculty are evaluated based on professional contribution to academics, contribution to short-term training courses, performing invigilation duties, contribution to College administrative bodies such as college academic council, Research council, the strategic planning committee, NBA, NAAC, ARIIA, etc.

Also, their research interests are evaluated based on their participation in conferences, workshops, publications in Scopus indexed journals, book publications, sponsored projects consultancy, research supervision, awards, honors, fellowships, etc.

d) The above set performance appraisal report is filled by employees in a given prescribed proforma which includes all the above sets related to points and sub-points. Filled in the prescribed format is verified by HOD to assess the attitudinal/behavioral/professional aspects of the faculty concerned. Then it is reviewed by the principal and Management.

Non-Teaching Staff

All non-teaching staff is also assessed through annual confidential reports. A few strategies are observed in appraising non-teaching staff's performance this includes the technical contribution of individuals such as subject knowledge, awareness, productivity, quality, innovation willingness to learn, diligence, etc. besides they also assess the behavioral aspects like group behavior, acceptability, punctuality, etc.

The Annual Confidential Report and the Performance Appraisal System have significantly helped in the evaluation of the performance of employees, in motivating them, analyzing their strengths and weaknesses, and ensuring better performance.

File Description	Documents
Paste link for additional information	www.sbce.ac.in
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 Institution has established a mechanism for conducting internal and external audits on the financial transactions every year to ensure financial compliance. SBCE regularly conducts internal and external financial audits. Treasurer and Accounts Department ensures maintenance of annual accounts and audits.

The mechanisms used to monitor the effective and efficient use of financial resources are as below:

- Before the commencement of every financial year, the principal submits a proposal on budget allocation, by considering the recommendations made by the heads of all the departments, to the management.
- The college budget includes recurring expenses such as salary, electricity, internet charges, maintenance cost, stationery, other consumable charges, etc., and non-recurring expenses like lab equipment purchases, furniture, and other development expenses.
- The expenses will be monitored by the Principal and Accounts department as per the budget allocated.

INTERNAL AUDIT

Internal audit is conducted half-yearly by the internal financial committee of the institution. All vouchers are audited by the internal financial committee on a half-yearly basis. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers. If any discrepancy is found, the same is brought to the notice of the principal. the committee thoroughly verifies the income and expenditure details and the compliance report of the internal audit is submitted to the management of the institution through the principal.

EXTERNAL AUDIT

An external audit is conducted once every year by an external agency. The accounts of the college are audited by chartered accountants regularly as per the government rules. The auditor ensures that all payments are duly authorized after the audit, the report is sent to the management for review. Any queries, in the process of audit, would be attended immediately along with the supporting documents within the prescribed time limits. The institution did not come across any major audit objection during the preceding years. All these mechanisms exhibit the transparency being maintained in financial matters and adherence to financial discipline to avoid defalcation of funds or properties of the institution at all levels. The audited statement is duly signed by the authorities of the management and chartered accountant.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

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	No File Uploaded
Details of Funds / Grants received from of the non- government bodies, individuals, Philanthropers during the year (Data Template)	<u>View File</u>

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

Institute maintains & follows a well-planned process for the mobilization of funds and resources. The process involves the Principal, Department Heads, Administrative officer, and Accounts office. Institute has designed some specific rules for fund usage and Resource utilization.

Mobilization of Funds

- The student Tuition fee is the major source of income for the institute.
- Fees charged are as per the university and government norms from students of various courses.
- Various government agencies like KTU, KSCSTE, AICTE sponsor events like seminars, FDPs, and workshops on sanction of application from faculties.
- Sponsorships are also sought from corporates for cultural events and fests.

Resource Mobilization Policy and Procedure

- Before the financial year begins, the Principal and Heads of Departments prepare the college budget.
- The institutional budget includes recurring expenses such as salary, electricity and internet charges, stationery & other maintenance costs.
- It includes planned expenses such as lab equipment purchases, furniture, and other development Expenses.
- The budget is scrutinized and approved by the management.
- The principal and accounts section monitor whether expenses are exceeding budget provision.
- Regular internal audits from the Charted Accountant make sure that the mobilization of the resources is being done properly.

Utilization of Funds

- Management monitors the optimum utilization of funds for various recurring and non-recurring expenses
- The department or the office seeks quotations from vendors for the purchase of equipment, computers, books, etc.
- The quotations are scrutinized by the HoD and based on the recommendations from the department and Principal; a final decision is made by Management based on parameters like pricing, quality, terms of service, etc.

Institutional Strategy for mobilization of funds and optimal utilization of resources

- Statutory auditors are also appointed who certify the financial statements in every financial year.
- The grants received by the college are also audited by certified auditors.
- Care is taken for optimal utilization of resources
- The college aims at promoting research, development, consultancy, and such other activities, involving the faculty at various levels.
- The optimal utilization is ensured through encouraging innovative teaching-learning practices.
- The available physical infrastructure is optimally utilized beyond regular college hours, to conduct remedial classes, co-curricular activities/extra-curricular activities, and parent-teacher meetings.
- Library also functions beyond college hours for the benefit of students, faculty, and alumni.
- The college infrastructure is utilized as an examination center for Government examinations/University Examinations and also as entrance examination centers like NEET, JEE, GATE, etc.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

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 Internal Quality Assurance Cell (IQAC) of SBCE carries out the activities that encompass all aspects of the Institute's functioning. The IQAC has immensely contributed to the implementation of quality assurance strategies and processes at all levels. The IQAC at SBCE was constituted in 2008. Since then, it has been performing the following tasks on a regular basis:

1. Improvement in quality of teaching and research by regular inputs to all concerned based on feedback from students.

2. Providing inputs for best practices in administration for efficient resource utilization and better services to students and staff.

3. Providing inputs for Academic and Administrative Audit and suggesting actions to DAB to be implemented in weak areas.

4. Research sharing and networking with other institutions in India and abroad

The Institute IQAC regularly meets twice a year. The Institute IQAC prepares, evaluates, and recommends the following for approval by the relevant Institute and Govt. statutory authorities:

(a) Annual Quality Assurance Report (AQAR)

(b) Self-Study Reports of various accreditation bodies (ISO 9001, UGC 12b, NAAC, NIRF, NBA)

(c) Performance Based Appraisal System

(d) Stakeholder's feedback

(e) Action Taken Reports

(f) New Programmes as per National Missions and Govt. Policies

ACADEMIC AUDIT:

The college conducts an academic audit of each department every year through IQAC to increase and maintain the quality of education. The academic Audit Committee is set up for this purpose. The audit committee visits each department and the course files, as well as lab files, are checked properly. Missing data are noted for corrective actions. The IQAC coordinator of the department suggests the programs be coordinated at the start of an academic year for the better performance of each department. At the end of the academic session, the IQAC coordinator collects details on publication, extension activity, collaboration, innovative and best practices, assignments, ICT-based activity, students' competition, seminars, FDPs, STTPs, and workshops organized. Due to the implementation of such academic audits, it is found that all departments and committees have been constantly improving their curricular, co-curricular, and extracurricular performances.

File Description	Documents
Paste link for additional information	<u>https://sbce.ac.in/academics/internal-</u> <u>quality-assurance-cell-iqac/</u>
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 reviews and takes steps to improve the quality of the teaching-learning process.

- The Academic Calendar is prepared in advance, displayed and circulated in the Institute, and strictly followed.
- All newly admitted students have to compulsorily attend the Orientation Programme, in which they are made aware of the teaching-learning process, the system of continuous evaluation, compulsory core courses, various curricular activities, discipline, and working system of the Institute,

etc.

- All students are also given a guided tour of the campus and the various facilities.
- Students are made aware of the Time-Table, Programme structure, syllabi of the courses before the semester commences.
- Conducts of classes are monitored by the Principal, HODs, and advisors of various classes.
- Class Committees are regularly conducted with students to take feedback and appropriate steps are taken to enhance the teaching-learning process.
- Feedback from students is also taken individually in online mode by advisors for all courses and directly through IQAC. Students are also free to approach the Director of the Institute for feedback and suggestions.
- Feedback is properly analyzed and shared with HoDs and Individual faculty members.
- The teaching-learning processes are reviewed, and improvements are implemented, based on the IQAC recommendations.

The major initiatives taken over the last five years include the following:

• MoUs with prestigious Institutes, Universities, Govt. agencies

• Application for NIRF and NBA Certifications

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	No File Uploaded
6.5.3 - Quality assurance initiat	tives of the A. All of the above

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)

File Description	Documents
Paste web link of Annual reports of Institution	https://sbce.ac.in/academics/internal- quality-assurance-cell-iqac/
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	<u>View File</u>
Upload details of Quality assurance initiatives of the institution (Data Template)	<u>View File</u>

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

Specific facilities provided for women in terms

1. Safety and security

Surveillance cameras are installed at different locations such as Institute entrance, Library, Workshops, administrative office, parking area and Computer Centres. The students are mandated to wear their IDs and are monitored by the full time vigilant security personnel guarding the gates. The hostels are properly fenced and gated, and are installed with CCTV to monitor the movements in passages and surrounding the buildings. Further, the inward and outward movements of outsiders are also monitored and recorded by professional security personnel. Women Warden and Lady Security Guards watch the activities of the women's hostel 24/7. The sanitary napkin incinerators as well as sanitary napkin vending machines are installed for the health and hygiene of the girls. Entry register is maintained in all hostel blocks to monitor the movement of the students. Anti-ragging Committee and Squads make sure that there are no instances of ragging anywhere in the campus and hostels. Medical assistance, grievance redressal, for women and complaint box are provided for ensuring safety.

b. Counselling

Institution has best system of student mentoring, which starts in the first year itself for all programs with the objective of nurturing students' academic and personal growth. In mentoring, one faculty is allotted as Mentor/Advisor for every group of maximum 20 students. As soon as a student joins the institute, the assigned Mentor does profiling of the student and document personal and academic details in the student record. Mentor educates the student about various course requirements, how to choose electives and various opportunities, competitions and projects in academia. Students are helped to route their interests and innovative idea effectively during the complete course of study at the institute. The students meet their Mentor for various reasons; some would like extra help with the material in a course and are shy to approach a new course instructor; a few might be facing problems adjusting to the new environment in the hostel; group students would also like to know about their options for going through internships during the break or even the benefits of the same; a few may want to do some minor project work or participate in various competitions in addition to their courses; some others might want to know their options after graduation and how to figure out where they would fit in better. Student record will be maintained by the Mentor/ Advisor till the students completes his/her graduation in the institution.

Specialist external Counsellor is appointed by the Institute for student counselling for one day in everymonth. Personality development programs are being organized regularly for the overall development of the students.

1. Common Room

Common room is available for girls with essential facilities like first aid box, bed, wash room etc.

Day care centers for young children -NIL
Any other relevant information - NIL
File Description	Documents			
Annual gender sensitization action plan	Nil			
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	<u>https://sbce.ac.in/wp-</u> content/uploads/2022/03/7.1.1.pdf			
7.1.2 - The Institution has facili alternate sources of energy and conservation measures Solar e Biogas plant Wheeling to the G based energy conservation Use power efficient equipment	d energy energy Grid Sensor-			
File Description	Documents			
Geo tagged Photographs	<u>View File</u>			
Any other relevant information	<u>View File</u>			

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:

A solid waste management unit was established in SBCE based on an MoU signed on 20th March 2016 between the management and Engen Dealers and Consultants Private Limited, Thiruvananthapuram. A webinar byDr. Chinchu Cherian, Post Doctoral Research Fellow, School of Engineering, University of British Columbia, Canada,on "Advances and Prospects in Solid Waste Management" was organized by the Department of Civil Engineering in association with Centre for Innovation and Research (CIR) of Sree Buddha College of Engineering, Pattoor on 30thApril, 2021.

Sewage Water Treatment:

The effluent from the campus is treated and the recycled water is used for gardening. The capacity of the treatment plant is 30 kilolitres per day.

Liquid Waste Management:

Liquid waste from sanitation is let into the appropriate drainage system. Storm water runoff is routed for plantation.. The campus landscape allows excellent percolation of rain water into the ground.

E-waste Management:

Some of the initiative conducted in campus for e-waste management:

- "Energy & Environment Conservation Club"
- A seminar on "E-Waste and other Hazardous Wastes Management"
- Collection of E-waste by students from an adopted village for three days (6,13,22 January 2018) in consultation with Clean Kerala Company, Thiruvananthapuram.

File Description	Documents		
Relevant documents like agreements / MoUs with Government and other approved agencies	<u>View File</u>		
Geo tagged photographs of the facilities	<u>View File</u>		
7.1.4 - Water conservation facili in the Institution: Rain water has Bore well /Open well recharge of of tanks and bunds Waste water Maintenance of water bodies an system in the campus	arvesting Construction er recycling		

File Description	Documents					
Geo tagged photographs / videos of the facilities	<u>View File</u>					
Any other relevant information		<u>View File</u>				
7.1.5 - Green campus initiative	s 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 						
 Use of bicycles/ Battery- vehicles Pedestrian-friendly path Ban on use of plastic 	-					
 2. Use of bicycles/ Battery- vehicles 3. Pedestrian-friendly path 	-					
 Use of bicycles/ Battery- vehicles Pedestrian-friendly path Ban on use of plastic 	-					
 2. Use of bicycles/ Battery- vehicles 3. Pedestrian-friendly path 4. Ban on use of plastic 5. Landscaping 	hways	View File				
2. Use of bicycles/ Battery- vehicles 3. Pedestrian-friendly path 4. Ban on use of plastic 5. Landscaping File Description Geo tagged photos / videos of	hways	View File 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	

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	No File Uploaded
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has disabled-friendly,	Α.	Any	4	or	all	of	the	above
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								

File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Policy documents and information brochures on the support to be provided	No File Uploaded
Details of the Software procured for providing the assistance	No File Uploaded
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).

Institution provides an inclusive environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. Different sports and cultural activities organized inside the college promote harmony towards each other. Commemorative days like (1) Independence Day (2) Republic Day, (3) Teacher's Day along with many regional festivals like Onam are celebrated in the college. This establishes positive interaction among people of different racial and cultural backgrounds. There are different grievance redressal cells in the institute like Student grievance redressal cell, Women grievance redressal cell which deal with grievances without considering anyone's racial or cultural background. Institute has code of ethics for students and a separate code of ethics for teachers and other employees which has to be followed by each one of them irrespective of their cultural, regional, linguistic, communal socioeconomic and other diversities.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View File</u>
Any other relevant information	<u>View File</u>

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

Every year Institute celebrates Republic Day and Independence Day with great pomp. Death and birth anniversaries of great personalities and Important National and International days are also celebrated meaningfully. The institution celebrates these days of national importance to recall the events or contribution of our leaders in building the nation. Thoughts of great Indian personalities sowed into the young minds through exhibitions and programmes conducted on these days.

Energy Conservation Day

Sree Buddha College of Engineering, Pattoor celebrated Energy conservation day on 14 December 202 and published a pledge related to energy conservation to all classes in each department in the college.

National Youth Day

Sree Buddha College of Engineering, Pattoor celebrated Energy National Youth Day on 12 January 2020. Volunteers from all departments sincerely worked together for making the campus a neat, healthy, pollution free environment.

Republic Day

On 71st Republic Day, our national flag was hosted by Prof.Saritha N K, faculty of ECE department and about 50 NSS volunteers participated in the ceremony since it was a Sunday.

Environmental Day

Sree Buddha College of Engineering, Pattoor celebrated Environmental Day on 5 June 2020 through online platform. The students and volunteers planted different saplings at their own home and shared the pictures.

Security Day

The Institution of Engineers (India) students Chapter of Department of Computer Science and Engineering, Sree Buddha College of Engineering and The Institution of Engineers (India) Kollam Local Centre jointly celebrated Security day by conducting a Webinar on Essentials of Cyber Security in Digital Era from 11.00 am to 12:30pm on 10.08.2020

Independence Day

Sree Buddha College of Engineering, Pattoor celebrated Independence Day on 15 August 2020. On this day, our Principal, Dr. S Suresh Babu, hosted our national flag and inaugurated an intracollege online competition "CHAKRA" at 8:30 am. As per the COVID 19 protocol, the programme was through online googelmeet platform.

Teacher's Day

Sree Buddha College of Engineering, Pattoor celebrated Teachers Day on 5 September 2020. The NSS has arranged google meet function and honoured the senior faculty, Prof.Thomas Mathew, head of HRD & HRM department in Sree Buddha college of Engineering.

Engineer's Day

Sree Buddha College of Engineering, Pattoor celebrated Engineer's Day on 15th September 2020. As part of the celebration an online webinar about "Flood Risk Management and Measures for Flood Hazard Mitigation" was carried out.

Gandhi Jayanthi

Sree Buddha College of Engineering, Pattoor celebrated Energy Gandhi Jayanthi on 2nd October 2020. As the part of Gandhi Jayanthi, a state level programme "Gandhi Smrithi"(Inspirational video competition result declaration) was hosted on google meet platform

World Students' Day

Department of Biotechnology and Biochemical Engineering celebrated World Student's day on October 15, 2020 in association with The Institution of Engineers (India) students Chapter of Department of Biotechnology and Biochemical Engineering, Sree Buddha College of Engineering and The Institution of Engineers (India) Kollam Local Centre jointly celebrated World Student's day.

Children's Day

Sree Buddha College of Engineering, Pattoor celebrated Children's Day on 14 November 2020. The college conducted state level programme "Blooming Buds" (competition for kids) which included events such as fancy-dress competition, speech, etc and the programmes were conducted in online mode.

File Description	Documents		
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://sbce.ac.in/wp-content/uploads/2022 /03/7.1.1-GENDER-EQUITY-REPORTS.pdf		
Any other relevant information	https://sbce.ac.in/strategic-plan-and-core- values/		
7.1.10 - The Institution has a professional ethics programme students, teacher administrators and other staff a periodic programmes in this records of Conduct is displayed of There is a committee to monitor the Code of Conduct Institution professional ethics programme students, teachers, administrators and other staff a periodic programme students, teachers, administrators and other staff a periodic programme students, teachers, administrators and other students professional ethics programme students, teachers, administrators and other students professional ethics programme students, teachers, administrators and other students professional ethics programme students professional ethics programme students professional ethics programme students professional ethics professional ethics programme students professional ethics professional ethics programme students professional ethics professional eth	rs, and conducts gard. The n the website or adherence to n organizes s for		

and other staff 4. Annual awareness programmes on Code of Conduct are organized

File Description	Documents
Code of ethics policy document	<u>View File</u>
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	<u>View File</u>
Any other relevant information	<u>View File</u>

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

Sree Buddha college of Engineering celebrated 14 national days from June 2020 to June 2021 like Independence Day, Engineers Day, Students Day, Children's Day etc. The detailed reports are given below.

Energy Conservation Day

Sree Buddha College of Engineering, Pattoor celebrated Energy conservation day on 14 December 202 and published a pledge related to energy conservation to all classes in each department in the college.

National Youth Day

Sree Buddha College of Engineering, Pattoor celebrated Energy National Youth Day on 12 January 2020. Volunteers from all departments sincerely worked together for making the campus a neat, healthy, pollution free environment.

Republic Day

On 71st Republic Day, our national flag was hosted by Prof. Saritha N K, faculty of ECE department and about 50 NSS volunteers participated in the ceremony since it was a Sunday.

Science day

Sree Buddha College of Engineering, Pattoor celebrated Science day on February 28, 2020. The Institution of Engineers (India) students Chapter of Department of Biotechnology and Biochemical Engineering, Sree Buddha College of Engineering and The Institution of Engineers (India) Kollam Local Centre jointly celebrated Science day.

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The Institution of Engineers (India) students Chapter of Department of Computer Science and Engineering, Sree Buddha College of Engineering and The Institution of Engineers (India) Kollam Local Centre jointly celebrated Security day by conducting a Webinar on Essentials of Cyber Security in Digital Era from 11.00 am to 12:30pm on 10.08.2020

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Sree Buddha College of Engineering, Pattoor celebrated Teachers Day on 5 September 2020. The NSS has arranged google meet function and honoured the senior faculty, Prof.Thomas Mathew, head of HRD & HRM department in Sree Buddha college of Engineering.

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Sree Buddha College of Engineering, Pattoor celebrated Energy Gandhi Jayanthi on 2nd October 2020. As the part of Gandhi Jayanthi, a state level programme "Gandhi Smrithi"(Inspirational video competition result declaration) was hosted on google meet platform

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Sree Buddha College of Engineering, Pattoor celebrated Children's Day on 14 November 2020. The college conducted state level programme "Blooming Buds" (competition for kids) which included events such as fancy-dress competition, speech, etc and the programmes were conducted in online mode.

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

7.2 - Best Practices

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

Title of the practice :Project Based learning Objective

Project Based Learning (PBL) prepares students for academic, personal, and career success, and readies young people to rise to the challenges of their lives and the world they will inherit. The objectives of PBL are

- To improve the mathematical skills of the students
- To enhance the students to acquire deeper knowledge through active exploration of real world challenges and problems.

The context

Project-Based Learning (PBL) is an instructional methodology that encourages students to learn and apply knowledge and skills through an engaging experience. PBL presents opportunities for deeper learning in- context and for the development of important skills tied to college and career readiness. It is a style of active learning and inquiry-based learning.

The Practice

In Project Based Learning, teachers make learning come alive for students. Students work on a project over an extended period of time - from a week up to a semester - that engages them in solving a real-world problem or answering a complex question. They demonstrate their knowledge and skills by developing a public product or presentation for a real audience. As a result, students develop deep content knowledge as well as critical thinking, creativity, and communication skills in the context of doing an authentic, meaningful project. Project Based Learning unleashes a contagious, creative energy among students and teachers.

Evidence of success

Students from Computer Science and engineering developed a project named "Essentia". It is a self learning app for children based on on Device Machine Learning. It can predict various objects and display materials based on the predicted object.

Students from Biotechnology and Biochemical Engineering developed a Mosquito repellent, Piyush Natura Herbal Tea, Bio-detergent etc.

Problems encountered and resources needed

Problem encountered during implementing Project based learning was less awareness among faculty members and students. This can be overcome by arranging proper training sessions to faculty members. Originality of the project is often lacking among the students. Sree Buddha College of Engineering takes steps to impart knowledge to the students to find solutions for socially relevant problems.

The resources needed for implementing the PBL is funding. The students are encouraged to take up socially relevant projects which can easily attract the funding from government agencies.

BEST PRACTICES-II

Title of the practice : Ideate Innovate Incubate (I3) @ Sree Buddha Incubation Centre

Objective

The objectives of I3 are

- Inculcate a culture of entrepreneurship through innovative student projects.
- Apply institutional mechanism to develop entrepreneurial culture among the students.
- Promote employment opportunities through innovation.

The context

Sree Buddha College of Engineering takes initiative in developing Entrepreneurial culture. Students are given platforms to showcase and present innovative ideas. The college has a dedicated space under IEDC named as Sree Buddha Incubation Centre (SBIC) for the students to work after college hours to develop innovative products. Potential entrepreneurs' ideas will be discovered, reviewed and the required support will be given for product development.

The practice

Motivated many students to participate in various innovation contests and has also bagged prizes in various events.

Students are given support for prototyping ideas through proper

mentoring. Financial support is also given for developing the product.

Students are also given opportunity to exhibit their prototypes in exhibitions conducted in different colleges across the state.

Students' startups are always motivated by giving a pre-incubation space in the college and later help given in registering the company officially.

Students are also given chance to interact with various Entrepreneurs in the state.

Evidence of success

- Student's group participated in the innovative project competition conducted by IHRD College of Engineering Adoor on 10/02/ 2020 and secured first prize for the project IoT based Inverter Parameter monitoring System
- Team Outliers with members Abhilash S. Nair, Dhiman Saha, Krishnakumar and Vishakh V presented the project "Project X: Human Character map generation using Machine Learning" and got selected to the final rounds of the Techathalon 2020 conducted by ICT Academy, Kerala.
- Idea of students Sivaprasad S, Mithun M, Ms. Jayalekshmi V.K, Midhula M, Arun Thampy titled "Mr. Saver : Railway GATE Assistive System" presented their prototype at the innovative project competition conducted by IHRD College of Engineering Adoor on 10/02/ 2020 and secured second prize.
- A group of 6 students were selected to the final round of Reboot Kerala Hackathon 2020 held during 28-02-2020 to 30-02-2020, 36 hors hackathon organized by the Department of Higher Education, Kerala for presenting an IoT Based Integrated Dam Monitoring System.
- Student's group got selected to the final round of the technical contest named ICTAK Techathlon conducted by ICT Academy of Kerala on 05/03/20 and 06/03/20 for presenting the project 6 step VSI control of 3 phase solar water pump with INC-MPPT algorithm.

- Student's group participated in 36-hour virtual tech innovation marathon conducted by the University of Maryland, Baltimore County and presented the project. Project of the team has won first prize in the health care category.
- Idea of students Ebin Babu Thomas, Akhil B and Hari Krishnan B S selected for the final round of Codefest- Vodafone Idea Limited on the theme AI Powered Solutions for Customer Engagements held during February 8-9, 2020.
- Students participated in the hackathon "Hacking Health" organized by Grapes Solutions and Kerala StartUp Mission during January 19-20, 2020.

Problems encountered and resources needed

Accounting and Business plan report creation for proper idea prototyping Identifying investors for startups

BEST PRACTICES-III

Title of the practice : Cambridge English Language Assessment (BEC)

Objective

The objectives of BEC are

- To boost student's employability
- To make the recruitment easier
- To develop the English language skills of students
- To make the student's acceptable for taking admission in foreign universities.

The context

Cambridge English: BEC is a high-quality international English language exam that shows students have the work-focused English language skills for study and work success. This market-leading exam is developed by Cambridge English Language Assessment - a department of the University of Cambridge and world leader in language teaching and assessment. Sree Buddha College of Engineering has taken initiative in making students fit for employability by practicing BEC.

The practice

- Student's are offered with a communicative English program for 15 hours.
- Student's who have registered for BEC certification exam special training will be provided.
- Certification Exam will be conducted for registered students.

MoU

• Sree Buddha College of Engineering has signed an MoU with International Institute of Foreign Studies for practicing BEC.

Evidence of success

• A total of 150 students have registered for BEC.

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

The Institution has established its quality of education through Research, Innovation, Social Responsibility and Entrepreneurship (RISE).

Research:

Faculty members and studentsare encouraged to do research. Sree Buddha College of Engineering is a established and approved research center under the affiliated university. Presently 15 PhD scholars are doing research at various research centers of SBCE. The grants received from various government funding agencies are nearly 2 crores in the last 5 five years. The IPR cell of SBCE regularly organizes programs on the awareness and importance of IPR.

Innovation

Innovation cell is established in the Institution for developing solutions for industry oriented problems. Under the innovation cell, Smart electric vehicle, low cost 3 D printer are developed

Social Responsibility

SBCE guides the students to provide innovative solutions for social problems. • This will lead to scalable and sustainable enterprises having a social and economic impact.

Entrepreneurship

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

File Description	Documents
Appropriate web in the Institutional website	No File Uploaded
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

1.To create an enabling environment for holistic development of Students, Faculty and Support Staff.

2. Conduction of Quality Circle Meeting (QCM) through IQAC.

3. Blended mode of Classes.

4. To Create two center for excellence (Artificial Intelligence and Teaching- Learning)