

# YEARLY STATUS REPORT - 2021-2022

Part A		
Data of the Institution		
1.Name of the Institution	LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING	
• Name of the Head of the institution	Dr. Kadimalla Appa Rao	
Designation	PRINCIPAL	
• Does the institution function from its own campus?	Yes	
Phone No. of the Principal	08659222933	
• Alternate phone No.	08659223936	
Mobile No. (Principal)	8333905791	
• Registered e-mail ID (Principal)	principal@lbrce.ac.in	
• Address	L.B.Reddy Nagar	
• City/Town	Mylavaram	
• State/UT	Andhra Pradesh	
• Pin Code	521230	
2.Institutional status		
• Autonomous Status (Provide the date of conferment of Autonomy)	17/09/2010	
• Type of Institution	Co-education	
• Location	Rural	

Financial Status	Self-financing
Name of the IQAC Co-ordinator/Director	Prof.B.Ramesh Reddy
• Phone No.	08659222933
• Mobile No:	9440990927
• IQAC e-mail ID	iqac@lbrce.ac.in
3.Website address (Web link of the AQAR (Previous Academic Year)	https://lbrce.ac.in/igac/igac_aga r/IOAC_AOAR_2020-21.pdf
4.Was the Academic Calendar prepared for that year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	https://lbrce.ac.in/academic_page s/aycalender.php

# **5.Accreditation Details**

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A	3.09	2013	05/01/2013	04/01/2018
Cycle 2	B++	2.96	2018	02/11/2018	01/11/2023
Cycle 2	А	3.20	2022	28/02/2022	27/02/2027

6.Date of Establishment of IQAC 01/08/2012

7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?

Institution/ Depart ment/Faculty/Sch ool	Scheme	Funding	Agency	Year of Award with Duration	Amount
Lakireddy Bali Reddy College of Engineering	CPE	υα	ΞC	01/04/201	6 0
Lakireddy Bali Reddy College of Engineering	2(f)	υα	ĴĊ	22/04/201	0 0
Lakireddy Bali Reddy College of Engineering	12(B)	UC	θC	28/09/201	1 0
8.Provide details re	garding the compo	sition of t	he IQAC:		
composition of	test notification regar of the IQAC by the H	EI	View File	<u>e</u>	
9.No. of IQAC mee	tings held during t	he year	4		
compliance t	nutes of IQAC meet o the decisions take the institutional web	n	Yes		
· 1	upload the minutes of d Action Taken Repo		No File U	Jploaded	
10.Did IQAC receiv funding agency to s the year?	e	•	Yes		
• If yes, mention the amount		40000			
11.Significant cont	ributions made by I	IQAC dur	ing the cu	irrent year (max	ximum five bullets)
• Participation in NIRF India Rankings 2022, DataquestCMR T Schools Survey 2022, Dataquest Digital Index 2022 and Dataquest Employability Index 2022. The IQAC collects required data and					

information on Academic Programmes, Students Enrolment, Faculty Strength, Infrastructure and Quality of the Programmes from all the departments and different sections of the College for regular update.

Organized FDPs on Emerging Areas, ICT tools , LMS, Hybrid mode of teaching and Administrative training programs for supporting staff. Organized training program on Pedagogical methods in teaching for all newly recruited faculty and faculty with less Faculty Performance Index(FPI). Conducted awareness program on OBE and Technology Enhanced Learning (TEL).

Introduced collection of feedback on curriculum by the faculty. Quality analysis of Semester End Examination(SEE) papers is introduced. Revised Self Appraisal forms by incorporating additional necessary information. Encouraged faculty to conduct regular parent teacher meetings.

Faculty and students are further encouraged to take MOOCs online certification courses and strengthen collaborations and Industry Institute Interaction through Industry Institute Interaction Cell.

Faculty are motivated to file the patents and publish the research work in SCI/WoS/SCOPUS and UGC approved journals. Under the initiative of IQAC, the IQAC team also helped the CSE,IT,ME and ECE departments to conduct a FDP with a fund of Rs 4.65 lakhs under ATAL (AICTE Training & Learning) program.

**12.Plan of action chalked out by IQAC at 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
Applying for Accreditations	NAAC peer team visit is done on 21-02-20222 & 22-02-2022 and Institution is graded as A with 3.20 score. UG- B.Tech Mechanical Engineering (ME) program reaccrediated by NBA under Tier-I for 3 A.Ys (A.Y.2023-24,A.Y. 2024-25 & A.Y.2025-26) UG-B.Tech CSE,IT,ECE and EEE programs are got NBA extension under Tier-I for 3 A.Ys (A.Y.2023-24,A.Y. 2024-25 & A.Y.2025-26)
Enhancing Students' English	• Training on Programming Skills

Communication Skills and Programming Skills	by Internal certified faculty (20 Faculty are certified). • 1169 placements during the A.Y with highest package of 14LPA are obtained • 81 No. of Students have achieved success in various competitive examinations like GATE, TOFEL,CAT, GMAT, etc.
Encouraging faculty to involve in research work leading to publications in reputed journals and Patent Publications	<ul> <li>Seed Money worth of Rs. 3,85,000 is provided • 9</li> <li>Advanced Research Labs are made available with the latest software tools and equipment. • 242 research papers are published in indexed journals • 75 patents are published</li> </ul>
Encouraging faculty for applying for sponsored Projects and consultancy work.	<ul> <li>35 Research proposals have been submitted to different funding agencies worth of 965.93 Lakhs • Rs. 37.97 Lakhs of research grant is received from various funding agencies</li> </ul>
Improving the activities of CIIE to come out with Innovative ideas and Startup proposals	<ul> <li>ARIIA Ranking-2021: Listed in the Band "Excellent" • IIC awarded 3.5 star rating by MoE, Innovation cell • 02 startups are launched • Mr. D.Sarath Kumar has started the second Start-Up INTERN-STUMP with LLP No. AAX-6999. • Mr. Sai Jaykrishna launched his first Start-Up "CHOAS Electronics" with LLP No.AAV-7667.</li> </ul>
Offering value added courses on Emerging Technologies	<ul> <li>20 Value added courses are conducted on latest technologies and career guidance and total</li> <li>2122 students are successfully completed the value added courses</li> <li>630 students are successfully completed the various NPTEL(Swayam) online courses on latest technologies</li> </ul>

	during the period Jan 2022 to April 2022.
Encouraging faculty members to enhance their teaching learning abilities	<ul> <li>Faculty members are effectively using ICT facilities, LMS and Microsoft Teams • 10 Faculty development Programs are organised on emerging technologies • 13 Faculty members were provided with financial support to attend International Conferences, FDPs,Workshops and Certifications programs • 100 faculty members have successfully completed the various NPTEL(Swayam) online courses on latest technologies during the period Jan 2022 to April 2022 • An inhouse teacher training program for the newly joined faculty and faculty with poor performance index is organized by IQAC and mentoring by senior faculty to improve the Performance Index</li> </ul>
Participation in Institutional Rankings/Survey	<ul> <li>NIRF2022- 251-300 Rank band under Engineering • ARIIA 2021 Rankings: "BAND EXCELLENT" (Private/Self Financed) • Internshala Rankings 2021: All India Ranking: 340 Zonal Rank:</li> <li>134 • Dataquest T Schools Survey</li> <li>2022: 64 Rank (Among all Private Colleges) • Dataquest</li> <li>Employability Index 2022 : 52 (Private Sectro T-Schools) • AAA+ grade awarded by Careers</li> <li>360 (2022) • 3.5 STAR Rating to CIIE by MoE Institution's Innovation Cell</li> </ul>
13.Was the AQAR placed before the statutory body?	Yes

• Name of the statutory body

14.Was the institutional data submitted to AISHE ?	Yes
Governing Body	03/12/2022
Name of the statutory body	Date of meeting(s)

• Year

Year	Date of Submission
2021-22	26/12/2022

# **15.Multidisciplinary** / interdisciplinary

In the institution, academic programmes are designed to adopt a multidisciplinary learning approach. The students studying in one branch of engineering can acquire a minor degree in another branch of engineering by studying the courses for a total credits of 20. The minor degree is in addition to the original degree awarded to the student. The open Elective subjects are being offered from the 5th semester to the 8th semester. The students can choose interdepartmental subjects based on their preferences.

Steps are being taken to train the faculty in a planned manner through a focused process. The institute is continuously taking steps to train the teachers and upgrade their skills and knowledge. Students and the Faculty of the institute are utilizing institute's research centres and innovation cell for doing extensive research in the field of Science and Technology. Moreover, 10% of students and 35% of faculty members currently are in the process of guiding and mentoring in a systematic way to foster the culture of innovation and start up ecosystem.

## 16.Academic bank of credits (ABC):

Academic Bank of Credits (ABC) is a virtual/digital storehouse that contains information on the credits earned by individual students throughout their learning journey. It will enable students to open their accounts and give multiple options for entering and leaving colleges or universities. There will be "multiple exits" & "multiple entries" points during the higher education tenure & credits will be transferred through the ABC seamlessly. ABC can be considered as an authentic reference to check the credit record of any student at any given point in time. The Academic Bank will be accountable for opening, closing, and validating the academic accounts of students. It will carry out tasks such as credit accumulation, credit verification, and credit transfer/redemption of students. The ABC accounts of students will be registered using National Academic Depository (NAD).

The LBRCE is in the process of implementing the Academic Bank of Credits for all the students for storing their credits in ABC. LBRCE created awareness among all the students on NAD and NAD process is already initiated and some students already utilized this opportunity. However, institute is contemplating to register for ABC through NAD.

#### **17.Skill development:**

National Educational Policy (NEP-2020) redefines the employability skills in students. The students shall adhere to the standards of the National Skills Qualification Framework (NSQF) and industry 4.0. The World is changing fast and students should capture present industry needs and he/she should be self-reliant.

To cope with technological advancements and to bridge the gap between the Institution and industry, LBRCE established Industry-Institute Interaction Cell and the Skill Development centres in collaboration with International organizations like Indo-Euro Synchronization, Aachen, Germany and Andhra Pradesh State Skill Development Corporation (APSSDC). The APSSDC is offering skill development courses in the latest technologies such as Industry 4.0, Robotics and Automation, PLC, AR and VR, IoT, machine learning, cloud computing, etc., for all branches of engineering students. The APSSDC is conducting skill-oriented training programmes in the college itself to make the students to industry ready and it helps students to get fully trained as per National Skills Qualification Framework (NSQFs).

In R20 UG regulations, skill oriented courses (SOC) are introduced in the curriculum. The skill courses are being offered from the 3rd semester to the 7th semester. The weightage of each skill course is 2 credits.

In R17 UG and R20 UG regulations of the academic curriculum of all branches of engineering, a course namely Internship is offered to the students. The students are completing the internship program either in offline mode or in the virtual mode in the industries. The students are learning the required skills and implementing real-time projects. The LBRCE has MOUs with many reputed organizations to train the students in the latest technologies and offer an internship to the students.

The centre provides special industry-readiness training in Aptitude, Verbal ability as well as Communication & Soft skills drawing expertise from the in-house training resource persons form Centre for Career Guidance & Training (CGT) for better placement of students. Other than using the services of the in-house resource persons, this centre invites experts from the corporate world, academia to train and guide students for better career opportunities.

The institution has undertaken a comprehensive approach towards promotion of innovation, incubation, and entrepreneurship. While identifying the need for a concerted strategy, the institution realized that not just fragmented endeavours, but a pragmatic ecosystem needs to be developed. LBRCE started the Centre for Innovation, Incubation and Entrepreneurship (CIIE) for nurturing and encouraging students with innovative business ideas. Also, this centre organize awareness programs on entrepreneurship liaisons with industry bodies and other agencies in incubating and facilitating start up ventures by students. The centre also offers guidance on career planning, apart from behavioural counselling in order to make students feel emotionally secure, confident and practical while facing the various professional challenges in future.

**18.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)** 

India is a treasure of value of culture, developed over thousands of years and manifested in the form of arts, works of literature, customs, traditions, linguistic expression, artefacts, heritage sites, and more. The people are benefiting from this culture wealth daily, in the form of visiting India for tourism, experiencing Indian hospitality, purchasing India's handicrafts and handmade textiles, reading the classical literature of India, practicing yoga and meditation, and participating in unique festivals, among many other aspects. The NEP 2020 stress the importance of preservation and importance of India's cultural wealth must be considered with high priority.

LBRCE is actively involved in the promotion of integration of the Indian knowledge system in different forms. We believe that it is necessary to include subjects in their course curriculum regarding

the essence of Indian traditional knowledge and the constitution of India. Every engineering student has to go through these subjects for their overall growth and development. In view of this, the subjects namely Universal Human Values, the Constitution of India, etc., were included in the curriculum of all branches of engineering. LBRCE conducts Yoga training classes to stress relief, flexibility, and immunity boost up to the students as well as the faculty. In this regard, we celebrate every year International Yoga Day in a grand manner on the 21st of June. In addition to the celebration of Republic day and Independence day, the cultural club/ Festive committee regularly conducts festive days to remember our Indian traditions and culture. The events include Saraswathi Puja, Sankranthi Sambaralu, Vinayaka chavithi, Ramjan, Christmas, Varalakshmi vratham, Ramanujan Day, Rangoli Competition, Holi Milan, Engineers day, Teachers day, etc. We are contemplating implementing music, and fine arts, as audit courses in the curriculum when revised in the coming years.

#### 19. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

The Institute follows the guidelines issued by the regulatory bodies such as UGC, AICTE, affiliated university JNTUK, Kakinada and Andhra Pradesh State Council of Higher Education (APSCHE) while designing the curricula. A series of all faculty meetings are conducted in correlation to the stated Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs). The set of courses which require modifications (deletion/addition) are prepared and programme curricula adopted at other leading academic institutes in India and abroad are compared. The following process is used to identify extent of compliance of the curriculum for attaining the Program Outcomes and Program Specific Outcomes:

# • Alumni give their feedback and suggestion during Annual Meets.

• Campus placement officer interacts with officials from Industry who visit for recruitment and obtain their feedback on the quality of the competencies of the students and the deficiencies of the curriculum being offered in relation to weakness and strengths of the programme.

• Outgoing students give feedback at the valedictory functions of respective technical associations.

• The information from all the above is discussed and deliberated in faculty meetings, BOS meetings and academic

council/Governing Body to incorporate required and feasible modifications to improve the quality of competencies of outgoing students.

Also, the Institute is planning to initiate student-centered classrooms and the elimination of traditional teaching practices. The innovative teaching methodologies adopted by the faculty members are provided in the evaluative reports of the departments. The faculty members use innovative teaching approaches or practices. Besides the chalk and talk method of lecture, the faculty uses the following methods:

In addition to traditional teaching-learning methods, the institution is highly interested in providing innovative methods for enriching the learning experience. The methodologies include illustration, special lectures, field study, case-studies, projectbased-methods, experimental methods and group-learning methods. The facilities arranged by the institution are:

#### 1. EXPERIENTIAL LEARNING

#### Curriculum component

Every UG and PG programs are designed with minimum of two laboratory components in each semester. Conduct of these laboratory programs contribute towards experiential learning of the specific branch of engineering in a substantial way.

#### Internship:

Large percentage of students of UG and PG programs attend an internship for 4 weeks in the industry during the summer break of their program. Internship is included in curriculum and implemented in R14, R17 and R20 Regulations of B.Tech and M.Tech Programs.

Tool Based Training Programs: The Institution collaborates with APSSDC, DASSAULT, CISCO, ARK Solutions (ANSYS), NI Academy, AWS, MEMS, e-Yantra, Indwell Automation to train the faculty and students to meet the industry requirements.

Industry Driven National/Global Student Competitions: The institution encourages the students to participate in competitions conducted by IIT/NIT/IIIT/AICTE at national/global level.

Field Visits: The Institution gives top priority for industrial visits as a value-added learning method to students to explore the

#### industry.

#### 2. PARTICIPATIVE LEARNING

#### Seminar/Workshops:

Presentation of seminar by students is mandatory in all programs offered at the institution. Usually, students present seminar on contemporary topics as well as state-of-the-art technologies. Students are trained on regular basis in modern trends and innovative technologies by organizing workshops/seminars by experts from industry.

Group Assignments/Mock Interviews: Group discussions/tasks are conducted from second year onwards as a part of soft skills courses. Mock interviews are conducted before the campus placements, to improve confidence levels of the student.

Case studies: The case study method is a participatory, discussionbased way of learning where students gain skills in critical thinking, communication, and group dynamics. Appropriate integration of case studies in chosen subjects are arranged by all departments.

Student Association and Professional Society chapters: Every department has a student association and professional society chapters through which various activities like quizzes, group discussions, seminars, and guest lectures are conducted.

3. PROBLEM SOLVING LEARNING

Project-based Learning:

Project work is mandatory for all the programs offered at the institution. The effective phases of survey, case-study, implementation, testing and report writing ensure the required project-based learning among the students. Some courses are augmented with learning through implementation of Problem Assisted Learning (PAL)/ Problem Based Learning (PBL).

Tutorials: Intended to have individual attention to develop better problem-solving skills with assistance of faculty.

Developing innovative models: Students are encouraged to take up real-world problems for developing new products/models with novelty in perspective of meeting challenges in industry, government and academia. Mini and Major projects: Work done in the earlier semesters through field visits, and information gathered during Internship is continued for development, and implementation.

Hands-on training programs: In every semester, training activities covering advanced courses, and latest technology industry are held for students to explore, and practice on current technologies

#### 20.Distance education/online education:

The present world is driven by digital technology and the whole globe come under the influence of the internet and the World Wide Web. The internet equipped both the education learner as well as the education provider and laid them together under the virtual roof. The NEP 2020 has a special focus on online education. NEP 2020 also emphasizes the creation of virtual labs wherein students can practice their theoretical knowledge and make course content available in different languages.

The LBRCE has a strategic plan to encourage stakeholders to participate in online education as per the National Education Policy. The institute has made MOOC courses mandatory and offered by NPTEL, under the SWAYAIM, etc., from R17 UG regulations. The institute is also encouraging the conduct of lab experiments through virtual labs in addition to regular labs. The faculty members are also using online platforms such as google classroom to deliver the lectures, for conducting the assignments/quizzes, and for providing E-resources to the students.

# **Extended Profile**

#### 1.Programme

1.1

15

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

### 2.Student

2.1

4100

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	<u>View File</u>
Institutional data in Prescribed format	<u>View File</u>

2.2

964

621

271

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>
2.3	4048

2.3

Number of students who appeared for the examinations conducted by the institution during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

# **3.Academic**

3.1

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

3.2

Number of full-time teachers during the year:

Extended Profile	
1.Programme	
1.1	15
Number of programmes offered during the year:	
File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>
2.Student	
2.1	4100
Total number of students during the year:	
File Description	Documents
Institutional data in Prescribed format	<u>View File</u>
2.2	964
Number of outgoing / final year students during t	he year:
File Description     Documents	
File Description	Documents
File Description         Institutional Data in Prescribed Format	Documents           View File
Institutional Data in Prescribed Format	View File 4048
Institutional Data in Prescribed Format 2.3 Number of students who appeared for the examin	View File 4048
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File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>
3.3	271
Number of sanctioned posts for the year:	
4.Institution	
4.1	454
Number of seats earmarked for reserved categories GOI/State Government during the year:	s as per
4.2	73
Total number of Classrooms and Seminar halls	
4.3	1453
Total number of computers on campus for academ	ic purposes
4.4	1575.27155
Total expenditure, excluding salary, during the year Lakhs):	ar (INR in
Part	B

# 1.1 - Curriculum Design and Development

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

The curricula developed have relevance to the regional/national/global developmental needs with well-defined learning objectives and outcomes at programme and course level. The department and the institute are guided and monitored in the preparation of course curriculum by two bodies, namely Board of Studies and Academic Council and typically undergoes with the following:

The Institute follows the guidelines issued by the regulatory

bodies such as UGC, AICTE, affiliated university JNTUK, Kakinada and Andhra Pradesh State Council of Higher Education (APSCHE) while designing the curricula. A series of all faculty meetings are conducted in correlation to the statedProgramme Outcomes (POS), Programme Specific Outcomes (PSOS) and Course Outcomes (COS). The set of courses which require modifications (deletion/addition) are prepared and programme curricula adopted at other leading academic institutes in India and abroad are compared.

For the effective design of curriculum structure feedback is collected from students, faculty, alumni, parents and employers.Curriculum revision is a continuous process with respect to elective and laboratory courses as per the need of the industry and regulatory bodies from time to time even though the normal cycle of revision is 3 years.

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	https://lbrce.ac.in/academic_pages/acadreg ulations.php

## 1.1.2 - Number of Programmes where syllabus revision was carried out during the year

15

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<u>View File</u>
Details of syllabus revision during the year	<u>View File</u>
Any additional information	<u>View File</u>

# **1.1.3** - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year

543

File Description	Documents
Curriculum / Syllabus of such courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<u>View File</u>
MoUs with relevant organizations for these courses, if any	<u>View File</u>
Any additional information	<u>View File</u>

## **1.2 - Academic Flexibility**

# 1.2.1 - Number of new courses introduced across all programmes offered during the year

### 162

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

# **1.2.2** - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

## 15

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
List of Add on /Certificate programs (Data Template)	<u>View File</u>

## **1.3 - Curriculum Enrichment**

1.3.1 - Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum

All the programmes offered in the institution include courses that

deal with cross-cutting issues relevant to Professional Ethics, Gender, Human values, Environment and Sustainability. Such crosscutting issues are integrated into the curriculum as Core, Mandatory and Elective courses in the undergraduate as well as postgraduate programmes.

The institution offers courses on Professional ethics and Human values, Business ethics and Corporate Governance, Human Resource Management, Environmental Science, Environmental Engineering, Renewable Energy Sources, Renewable Energy Technologies, Green buildings, Water and Wastewater Engineering, Environmental Sanitation, Energy Environment and Pollution, and Energy Conservation and Management.

#### PROFESSIONAL ETHICS AND HUMAN VALUES:

Towards the end of this course, students are expected to develop the right knowledge and motivation to undertake a journey towards holistic and value-based living.

ENVIRONMENT AND SUSTAINABILITY:

A Green Energy Club, PRAKRUTHI- The Environmental club organizes various programs to enhance environmental awareness and make students and staff become conscious of their roles in environment protection.

#### GENDER:

In addition to enriching the curriculum by integrating crosscutting issues, the institution organises various programs and events by the NSS unit,4(A) Bn NCC Girls wing.

Moreover, the institution organizes special programs for girl students to achieve Women Empowerment and Gender sensitization through SAHELI-The Girls Club.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<u>View File</u>
Any additional information	<u>View File</u>

# **1.3.2** - Number of value-added courses for imparting transferable and life skills offered during the year

#### 15

File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value-added courses	<u>View File</u>
Any additional information	<u>View File</u>

# **1.3.3** - Number of students enrolled in the courses under 1.3.2 above

## 1902

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	<u>View File</u>

# 1.3.4 - Number of students undertaking field work/projects/ internships / student projects

## 1097

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<u>View File</u>
Any additional information	<u>View File</u>

# 1.4 - Feedback System

А.	<b>All</b>	4	of	the	above
	Α.	A. All	A. All 4	A. All 4 of	A. All 4 of the

File Description	Documents		
Provide the URL for stakeholders' feedback report	https://lbrce.ac.in/iqac/iqaccurriculumfee dback.php		
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>		
Any additional information		<u>View File</u>	
1.4.2 - The feedback system of t comprises the following	he Institution	A. Feedback collected, analysed and action taken made available on the website	
File Description	Documents		
Provide URL for stakeholders' feedback report	https://lbrce.ac.in/igac/igaccurriculumfee dback.php		
Any additional information	<u>View File</u>		
TEACHING-LEARNING AND EVALUATION			
2.1 - Student Enrollment and P	rofile		
2.1.1 - Enrolment of Students			
2.1.1.1 - Number of students ad	mitted (year-wi	se) during the year	
1071			
File Description	Documents		
Any additional information	<u>View File</u>		
Institutional data in prescribed format	<u>View File</u>		
2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)			
418			

File Description	Documents
Any additional information	<u>View File</u>
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 students' learning levels and organises special programmes for both slow and advanced learners.

The learning levels of the students are identified by the interaction of the faculty with students in the class and based on that, mentoring will be done by the respective mentor. Special care is given to slow learners by conducting additional classes and suggested to follow the standard pre-requisite books to understand the basics.

1. Slow Learners

Students who secure less than 50% of marks in continuous assessments, and have one or more backlogs in the semester end examinations are considered as slow learners. The identified slow learners will be considered for bridge classes, and monitored by respective counsellor. In order to support and motivate the slow learners, the following measures are taken.

Bridge Classes

Remedial Classes

Mentoring system:

For an effective mentoring of the students, 20 to 25 students are assigned to a faculty mentor.

#### 1. Advanced Learners

Those who secure CGPA of more than 7.75 are considered as advanced learners. The following choices are offered for their higher levels of learning.

- Concentrate on job-oriented trainings to get better placements.
- Opportunities to participate in various conferences, seminars, quiz competitions and paper or poster

#### presentations.

# • Crash course on competitive examinations (GATE, GRE TOFEL, IELTS) for higher studies.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.lbrce.ac.in/cgt/index.php

#### 2.2.2 - Student - Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
01/07/2021	4100	271
File Description	Documents	
Upload any additional information	<u>View File</u>	

#### 2.3 - Teaching- Learning Process

2.3.1 - Student-centric methods such as experiential learning, participative learning and problemsolving methodologies are used for enhancing learning experiences:

In addition to traditional teaching-learning methods, the institution is highly interested in providing innovative methods for enriching the learning experience. The methodologies include illustration, special lectures, field study, case-studies, projectbased-methods, experimental methods and group-learning methods. The facilities arranged by the institution are:

1. EXPERIENTIAL LEARNING

Curriculum component

Every UG and PG programs are designed with minimum of two laboratory components in each semester. Conduct of these laboratory programs contribute towards experiential learning of the specific branch of engineering in a substantial way.

Internship:

Tool Based Training Programs

Industry Driven National/Global Student Competitions:

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Field Visits
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2. PARTICIPATIVE LEARNING

Seminar/Workshops:

Presentation of seminar by students is mandatory in all programs offered at the institution. Usually, students present seminar on contemporary topics as well as state-of-the-art technologies.Students are trained on regular basis in modern trends and innovative technologies by organizing workshops/seminars by experts from industry.

Group Assignments/Mock Interviews:

Case studies:

Student Association and Professional Society chapters:

3. PROBLEM SOLVING LEARNING

Project-based Learning:

Project work is mandatory for all the programs offered at the institution.

Tutorials:

Developing innovative models:

Hands-on training programs: In every semester, training activities covering advanced courses, and latest technology industry are held for students.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	https://www.lbrce.ac.in/academic_pages/tim etables.php

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

Institution encourages intensive use of ICT tools and online resources for effective teaching and learning processes. In this regard all classrooms, seminar halls, laboratories, and auditoriums are equipped with ICT facilities which include Interactive Pannel, LCD projectors, computers with internet connection. . Institution motivates both students and faculty to register and learn from various MOOC platforms.

ICT tools and campus LAN are used widely to conduct laboratory experiments virtually. Industrial expert lectures from data base are used to train the students such that expertise in domain-based knowledge is gained through usage of such tools online. All faculty members are effectively using the available ICT enabled tools for effective implementation of teaching-learning process. Good number of faculty members are using learning material developed by them as well as SWAYAM, NPTEL, MIT OER, YouTube, Coursera. SWAYAMPRABHA DTH Channels are available . A media centre is established to develop learning materials in the form of econtent.

The Central Library of our institution is also equipped with ICT tools. Digital library provides facilities to access e-resources, e-journal articles, e-books from any place, and OPAC to check the catalogue of library resources.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://lbrce.ac.in/studentcorner_pages/ce ntral_library.php#digital
Upload any additional information	<u>View File</u>

# 2.3.3 - Ratio of students to mentor for academic and other related issues

### 2.3.3.1 - Number of mentors

242

File Descript	ion	Documents
	wise number of olled and full-time oll	<u>View File</u>
Circulars wit assigning me	h regard to entors to mentees	<u>View File</u>

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

The Institution follows a well-planned academic calendar which is given by College Advisory Board (CAB) members. The academic calendar is prepared with minimum number of working days, duly taking the national & public holidays, festival breaks, summer vacation, in addition to the college fests, training programmes, and placement activities into cognizance. The academic calendar provides adequate balance between academic and non-academic activities, teaching, and examination schedule. The academic calendar is approved by the Academic Council. Then calendar is uploaded in the institution website, and communicated through the webmail to all the relevant functionaries for adherence.

Every faculty member prepares a 'Lesson Plan' for every course as per academic calendar and it is uploaded in the website at the beginning of the semester and is duly approved by the Head of the department. Respective faculty prepare teaching plans as a part of their course files keeping the following points in view

- Course Objectives and Outcomes
- COs-POs & PSOs Articulation Matrix
- Syllabus content to be delivered
- Time allotment
- Teaching methodologies
- Assessment tools
- Cognitive levels of learning
- Content beyond the syllabus

File Description	Documents	
Upload the Academic Calendar and Teaching Plans during the year	<u>View File</u>	
2.4 - Teacher Profile and Quality		

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

271

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>
Any additional information	<u>View File</u>

# 2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

85

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	<u>View File</u>
Any additional information	<u>View File</u>

# **2.4.3** - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

## 1989

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	<u>View File</u>

# 2.5 - Evaluation Process and Reforms

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

## 13.5

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<u>View File</u>
Any additional information	<u>View File</u>

# 2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

122

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
Upload any additional information	<u>View File</u>

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

Examination reforms by the institution keeps its examination system open for modifications to strengthen it from time to time, to make the system fool proof. It also, address the grievances of students, if any. The institutional reforms activities keep the examination system at par with the examination reforms by AICTE.

The following significant reforms are implemented in the Examination Management System (EMS).

- Examination schedules are prepared by adhering to institution academic calendar.
- In continuous assessment, a couple of midterm examinations, and assignments are conducted as per the schedules.
- The marks obtained by the students are posted in ERP(i-Campus) and it is made visible to both students and parents.
- All the permissible pre-examination and post-examination tasks have been integrated with Examination Management System using ERP. The college has been involving electronic processes in publishing the examination schedules in the college website, preparing database of eligible candidates, conducting examinations on pre-printed bar-coded and OMR

answer booklets, and post-examination task- declaration of results, and issue of grade cards.

- The question paper for the Semester End Examinations (SEE) is also set by external members from premier institution.
- Special squad team comprises of internal faculty to take prompt actions by against malpractices,

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://lbrce.ac.in/college_docs/policies/ 7.%20Examination%20policy.pdf

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

The Programme outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of all the programs offered by the institution are framed through discussion with course instructor, Course Coordinator, Module Coordinator, Program Assessment Committee (PAC), Department Academic Committee (DAC) and finally approved in BoS meetings. The COs are in line with POs & PSOs of the department.

The COs are published in academic regulations and curriculum book, and departmental website. They are made reachable to all the stakeholders of the program through institution website, faculty workshops, student awareness workshops, student induction programs and faculty meetings. The POs and PSOs are achieved through a curriculum that offers a number of courses. Each course has a defined set of COs that are mapped to the POs & PSOs. A set of performance criteria are used to provide a quantitative measurement of how well COs are achieved. The COs are thus directly and quantitatively assessed, and in turn contribute for attainment of POs and PSOs.

The course outcomes of each course are mapped to the POs and PSOs with a level of emphasis being substantial, moderate and slight.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	<u>View File</u>
Link for additional Information	https://lbrce.ac.in/academic_pages/pospsos .php

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

The following processes & tools are used for the attainment of course outcomes.

Mid Examinations-

Quiz examination-

Semester End Examination-

Assignment-

Rubrics are formulated for the assessment of laboratory, mini project, major project, seminar and internship courses.

The performance of the students in the examinations (Mid-Semester, Assignment /Quiz & Semester End Examinations) during the semester in each course is used to compute the level of direct attainment of the COs.

Threshold value is taken as either class average mark or 60% of the marks allocated to the question whichever is maximum.

Attainment of Program Outcomes and Program Specific Outcomes:

a) Direct assessment:

The performance of the students in the examinations during the semester in each course is used to compute the level of attainment of the POs and PSOsthrough the mapping of questions to COs and COs to POs and PSOs.

b) Indirect assessment:

The following indirect assessment tools are used for calculating PO & PSO attainments.

- Programme exit survey
- Student portfolio

The overall PO & PSO attainments are calculated by considering 70% of direct attainment and 30% of indirect attainment through surveys.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://lbrce.ac.in/academic_pages/pospsos .php

### **2.6.3 - Pass Percentage of students**

**2.6.3.1** - Total number of final year students who passed in the examinations conducted by Institution

#### 959

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://lbrce.ac.in/examsection_pages/exam annual.php

#### 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://www.lbrce.ac.in/igac/igac\_sss/IQAC\_SSS\_2021-22.pdf

## **RESEARCH, INNOVATIONS AND EXTENSION**

**3.1 - Promotion of Research and Facilities** 

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

The institution has a well-defined R&D Policy in place to promote research by the faculty and students in tune with the requirements of the corporate world. To enhance the research activities, the institution is ready to provide seed funding or partial funding based on the merit of proposals submitted by faculty or students. The faculty and students are encouraged to present their ideas / project proposals before the research committee for getting the sanction of seed funding in accordance with institution guidelines.

Research Centres and Advanced laboratories are established in various departments of the institution with necessary software and computing facilities for carrying out research activities. Four Research Centres of our institution are recognized by the affiliated university JNTUK, Kakinada to facilitate research and guide the PhD scholars.

The institution governing body reviews the complete research activity and takes the required budget allocation to upgrade the research facilities as well as other research policy decisions every year.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<u>View File</u>
Provide URL of policy document on promotion of research uploaded on the website	https://lbrce.ac.in/college_docs/policies/ 9.%20Research%20Policy.pdf
Any additional information	<u>View File</u>

## 3.1.2 - The institution provides seed money to its teachers for research

**3.1.2.1** - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

3.85

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

# **3.1.3** - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

0	
File Description	Documents
e-copies of the award letters of the teachers	<u>View File</u>
List of teachers and details of their international fellowship(s)	<u>View File</u>
Any additional information	<u>View File</u>

# **3.2 - Resource Mobilization for Research**

# **3.2.1** - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

# 25.57

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	<u>View File</u>
List of projects and grant details	<u>View File</u>
Any additional information	<u>View File</u>

# 3.2.2 - Number of teachers having research projects during the year

11

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://lbrce.ac.in/rnd_pages/rndprojects. php
List of research projects during the year	<u>View File</u>

# 3.2.3 - Number of teachers recognised as research guides

35		
File Description	Documents	
Upload copies of the letter of the university recognizing teachers as research guides	<u>View File</u>	
Institutional data in Prescribed format	<u>View File</u>	

# **3.2.4** - Number of departments having research projects funded by Government and Non-Government agencies during the year

#### 6

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	https://dst.gov.in/ngp
Any additional information	<u>View File</u>

# **3.3 - Innovation Ecosystem**

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

Eco System for Innovation

The institution has undertaken a comprehensive approach towards promotion of innovation, incubation, and entrepreneurship. The manifestation of such eco-system at our institution is as follows.

1. Incubationand Start-up Policy

An Incubation & Start-up Policy is in place that facilitates students and faculty to carry out innovation activities.

2. Resources

Centre for Innovation, Incubation and Entrepreneurship (CIIE) is established with required facilities.Institution encourages the faculty and students to protect their Intellectual property Rights (IPR) by providing facilitates and financial support.

CIIE has been recognized by IIC in Nov. 2018 and the institution obtained Two-star rating in 2018-19 and Three-star rating in 2019-20 for activities undertaken as per IIC calendar.

R&D Cell has been actively engaging the faculty and students to carry out research in cutting-edge technologies by establishing advanced research labs in addition to four JNTUK recognized research centres. The institution has been making the seed money available for the faculty to undertake Innovative projects with relevant material resources.

3. Collaboration

Collaborations have been established with the following:

- NIT Trichy
- Atal Incubation Centre, S.K. University, Anantapur.
- National Instruments
- DASSAULT Systems
- IISc, Bangalore
- IITB, Bombay
- European Centre for Mechatronics (ECM), Germany

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://lbrce.ac.in/committees/ciie.php

# **3.3.2** - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

41

File Description	Documents
Report of the events	<u>View File</u>
List of workshops/seminars conducted during the year	<u>View File</u>
Any additional information	<u>View File</u>

# **3.4 - Research Publications and Awards**

A. 2	All d	of	the above	
	A. 2			A. All of the above

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	<u>View File</u>
Any additional information	<u>View File</u>

**3.4.2** - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

3.4.2.1 - Number of PhD students registered during the year

46

File Description	Documents
URL to the research page on HEI website	https://lbrce.ac.in/rnd_pages/rndguidance. php
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

# 3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website

### during the year

### 133

File Description	Documents
List of research papers by title, author, department, and year of publication	<u>View File</u>
Any additional information	<u>View File</u>

### **3.4.4** - Number of books and chapters in edited volumes / books published per teacher during the year

### 127

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

### **3.4.5** - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

### 3.4.5.1 - Total number of Citations in Scopus during the year

### 475

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

### **3.4.6** - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

### 3.4.6.1 - h-index of Scopus during the year

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

### 3.5 - Consultancy

**3.5.1** - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

0.17

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

### **3.5.2** - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

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

### **3.6 - Extension Activities**

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

The institution envisions a close and shared bonding with the neighbourhood community through a network of activities and services for its socio-economic development. Our students receive the best training in social service and community engagement through the initiatives of our NSS unit at NAtional and State level. The institution promotes regular engagement of students, faculty and supporting staff with the neighbourhood community for a holistic and sustained community development through various activities listed below.

Advancement in Technology Activities

Social and Community Service Activities

Sensitization: These service activities have made the students understand practical problems of the common people in society and enhance social empathy among them. Such programmes helped our students to become more sensitive and responsive to the societal needs.

Public Health and Safety Activities

Environmental Protection Activities

Sensitization: These events createan awareness on healthy environment, cleanliness, and sanitation practices, besides highlighting the values of plantation, environmental protection for reducing land, water and air pollutions.

Adopting Village Activities

To discharge its sacrosanct duty towards the socio-economic betterment of the neighbourhood community, the institution has a policy of adopting one nearby village every year.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.lbrce.ac.in/nss/index.php

3.6.2 - Number of awards and recognition received by the Institution, its teachers and

### students for extension activities from Government / Government-recognised bodies during the year

### 152

File Description	Documents
Number of awards for extension activities in during the year	<u>View File</u>
e-copy of the award letters	<u>View File</u>
Any additional information	<u>View File</u>

# 3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

#### 29

File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	<u>View File</u>

### 3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

#### 2672

File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	<u>View File</u>

### **3.7 - Collaboration**

### 3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

#### 37

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	<u>View File</u>

### 3.7.2 - Number of functional MoUs with institutions of national and/or international

### importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

#### 18

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<u>View File</u>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<u>View File</u>
Any additional information	<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 equipments, etc.

The college has adequate number of classrooms and laboratories as per norms of UGC and AICTE for effective implementation of the teaching-learning process. Further, every department is equipped with its own computing resources as well as departmental library. The Departments have required as well as specialized software in their laboratories. In addition to the above, the college has a Central Library including a Digital Library which is well equipped with many learning resources.

The college has auditoriums "Dr. A.P.J. Abdhul Kalam Hall" and "Dr. Sarvepalli Radhakrishnan Hall" in addition to the department seminar halls. All seminar halls are ICT enabled with interactive panels.Moreover, the institution has established 09 advanced laboratories

#### Computing and ICT Facilities

The college has provided more than 1300 computers and 150 laptops distributed over all the departments for day-to-day usage.

Each department is provided with one Smart Classroom, one Interactive panel. All classrooms are provided with necessary ICT facilities for effective implementation of Teaching-Learning. Digital display systems are made available in each block. A centralized media centre facility is also added for preparation of learning material and e-content for the benefit of students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.lbrce.ac.in/iqac/iqac_aqar_sup port_docs/2021-22/4.3.4 Institution%20has% 20Facilities%20for%20e- content%20development.pdf

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

With the availability of 09 acres of land physical education department has arranged facilities for playgrounds, outdoor stadium, and indoor stadium. At present all these facilities are adequate for conducting outdoor as well as indoor games for both boys and girls. The institution hosts inter University zonal tournaments regularly on campus. A well-qualified Physical Director with support staff, trains the students in both indoor and outdoor games.

Yoga, Meditation Centre, and Cultural activities:

- Full-time yoga master is available for yoga training
- A 60-capacity auditorium is provided for Yoga and Meditation.
- Yoga certification course is added as a mandatory course in the curriculum
- International Yoga Day is celebrated every year with major participation from students and Staff.
- Kruthi-the fine arts and Cultural club is established to promote cultural activities in the campus. This Club encourages students to participate in District, State, National level, Inter Collegiate and Inter University level cultural festivals. LAKSHYA- a national level Technical and Cultural fest is conducted every year with participation of students from other institutions within as well as outside the state. As part of annual day celebrations, various cultural activities are also organized under the auspices of this club.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.lbrce.ac.in/sports/index.php

### 4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

73

File Description	Documents
Upload any additional information	<u>View File</u>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

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

### 483.90857

File Description	Documents
Upload audited utilization statements	<u>View File</u>
Details of Expenditure, excluding salary, during the years	<u>View File</u>
Any additional information	<u>View File</u>

### 4.2 - Library as a Learning Resource

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

Library is fully automated using the following Integrated Library Management System:

Name of the ILMS software: ERP

Nature of automation (fully or partially): Fully

Version: 2018

Year of automation: 2005&2018

Online Public Access Catalogue (OPAC) is available for remote access.

Library automation is implemented in a phased manner, the details of which are given below:

The central library is operating on an Integrated Library Management System since 2018, while VolkSoft Technologies Integrated Library Management System was in use till that time.

The ERP software is integrated with Library Management system that is designed and developed by D-Base solutions. This user-friendly software is developed to work under client-server environment. This software is suitable for bibliographic formats and circulation protocols. The modules included in LMS with menu driven facilities are Circulation, WEB-OPAC, Administration, Catalogue, Member Login/Logout.

File Description	Documents	
Upload any additional information	<u>View File</u>	
Paste link for additional information	https://lbrce.ac.in/studentcorner_pages/ce ntral_library.php	
4.2.2 - Institution has access to	the following: A. Any 4 or more of the above	

### 4.2.2 - Institution has access to the following: A. Any 4 or more of the above e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources

File Description	Documents
Details of subscriptions like e- journals, e-books, e- ShodhSindhu, Shodhganga membership	<u>View File</u>
Upload any additional information	<u>View File</u>

### **4.2.3** - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

### 26.21132

File Description	Documents
Audited statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
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 - Usage of library by teachers and students (footfalls and login data for online access)

### 4.2.4.1 - Number of teachers and students using the library per day during the year

231

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

### **4.3 - IT Infrastructure**

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

The institute has an IT policy in place which specifies clearly about the procedures to be adopted for all IT facilities that are made available in the campus. Adequate budget allocations are made regularly to establish, maintain, and upgrade these IT facilities. IT facilities include computing systems, Wi-Fi systems, cybersecurity, intranet, internet, and all other software necessary for handling these systems as well as support systems like website, campus management software, library information system, MOOCs, CCTVs, biometric devices, Learning Management System (LMS), online assessments, access to online learning resources.

Adequate budget allocations are made for these upgradations as and when required

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://lbrce.ac.in/college_docs/policies/ 12.IT%20Policy.pdf

### 4.3.2 - Student - Computer ratio

Number of Students		Number of Computers	
4100		1453	
File Description	Documents	Documents	
Upload any additional information		<u>View File</u>	
<b>4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus</b>		A. ?50 Mbps	
File Description	Documents		
Details of bandwidth available in the Institution		<u>View File</u>	
Upload any additional information	<u>View File</u>		
4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing		A. All four of the above	
File Description	Documents		
Upload any additional information		<u>View File</u>	
Paste link for additional information	https://lbrce.ac.in/iqac/iqac_reassessment 		
List of facilities for e-content development (Data Template)	<u>View File</u>		

### 4.4 - Maintenance of Campus Infrastructure

### **4.4.1** - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

### 1191.36298

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	<u>View File</u>

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

The institution has a well-defined maintenance policy which specifies procedures for maintaining physical, academic and support facilities.

The institution has established a maintenance section with adequate staff.

As per maintenance policy a common procedure is as following:

- Any problem that occurs in a department is represented to the maintenance supervisor through a letter/mail.
- The supervisor deputes a skilled person/technician to attend to the specific problem.
- The skilled person will resolve the problem on site if no additional material is required. In case of material requirement, it is received from the maintenance section or central store through proper request.
- If the material is to be procured from outside, permission is to be obtained from the purchase committee on recommendation of maintenance supervisor.
- Annual stock verification is conducted every year and the status of furniture, lab equipment, stationery, ICT facilities, Library, sports items and all other assets is collected. All the items usable are accordingly repaired and maintained.
- While purchasing any new equipment the terms of Annual Maintenance Contract (AMC) are also taken into consideration before deciding the purchase.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://lbrce.ac.in/college_docs/policies/ 13.%20Maintenance%20policy.pdf

### STUDENT SUPPORT AND PROGRESSION

### **5.1 - Student Support**

### **5.1.1** - Number of students benefitted by scholarships and freeships provided by the Government during the year

#### 2542

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
Upload any additional information	<u>View File</u>

### 5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

File Description	Documents
Upload any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>
5.1.3 - The following Capacity I and Skill Enhancement activiti organised for improving studer capabilities Soft Skills Languag Communication Skills Life Skil Physical fitness, Health and Hy Awareness of Trends in Techno	es are nts' ge and lls (Yoga, /giene)

File Description	Documents
Link to Institutional website	https://www.lbrce.ac.in/iqac/iqac_aqar_sup port_docs/2021-22/5.1.4_Number%20of%20stud ents%20beneftted%20by%20Career%20Counselin g%20and%20Guidance%20for%20Competitive%20E xaminations.pdf
Details of capability development and schemes	<u>View File</u>
Any additional information	<u>View File</u>

### **5.1.4** - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

File Description	Documents
Any additional information	<u>View File</u>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<u>View File</u>
5.1.5 - The institution adopts the mechanism for redressal of stud- grievances, including sexual have ragging: Implementation of guid statutory/regulatory bodies Create awareness and implementation with zero tolerance Mechanism submission of online/offline stud- grievances Timely redressal of	dents' arassment and idelines of eating of policies n for dents'

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti- ragging committee	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>
Upload any additional information	<u>View File</u>

### **5.2 - Student Progression**

### 5.2.1 - Number of outgoing students who got placement during the year

### 623

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>

### 5.2.2 - Number of outgoing students progressing to higher education

### 23

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Details of students who went for higher education	<u>View File</u>
Any additional information	<u>View File</u>

### **5.2.3** - Number of students qualifying in state/ national/ international level examinations during the year

## 5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Any additional information	<u>View File</u>

### 5.3 - Student Participation and Activities

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

19

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>

5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

An active student council and representation of students on academic and administrative bodies is in place at our institution. The institution promotes value-based education for inculcating social responsibility and good citizenry among its student community. For this, the institution has put in place the necessary infrastructure and encourages active participation of the students in academic, social, and cultural activities. The institution believes that overall and holistic development is possible only with the participation of students in all spheres of activities. Keeping this in view as well as statutory recommendations of UGC, and AICTE, the institution has made adequate representation of students in specific cases as members. The role of student members in few specific cases are described in the following:

Academic and Administrative Planning:

- Student members are involved in
  - Internal Quality Assurance Cell (IQAC):
  - Student Council
  - library committee
  - Class Review Committee
  - Anti Ragging Committee
  - T&P Coordinators for assisting the Placement Cell

- Canteen Committee in order to take feedback regarding the functions of the canteen
- hostel committee
- NSS and NCC Committee
- Instituional Fest and Annual Day celebrations

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.lbrce.ac.in/committees/student council.php

### 5.3.3 - Number of sports and cultural events / competitions organised by the institution

26

File Description	Documents
Report of the event	<u>View File</u>
List of sports and cultural events / competitions organised per year	<u>View File</u>
Upload any additional information	<u>View File</u>

### 5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

The Alumni Association of Lakireddy Bali Reddy College of Engineering (AALBRCE) is a registered society with registration number 154 on 28th April, 2006. The main objective is to enrol all alumni as members of the association and facilitate active participation of the alumni in appropriate activities, events, and extend help in initiatives taken by the institution. The AALBRCE also coordinates the networking of all the LBRCE alumni to create a single global LBRCE community for the benefit of our institution as well as current student community. The alumni-meet is organized every year in the month of February on second Saturday.

The Academic and Professional Support contributions of AALBRCE are described below:

• Feedback is collected from the alumni to design regulations

and update the curriculum accordingly.

- Board of Studies members nominated from alumni
- Feedback from the alumni helps the current students whenever recruitment drives are being conducted.
- Alumni members conduct mock interviews for current students which also helps them in placement.
- Career guidance and mentoring help is extended by many alumni.
- The alumni network of the institution helps in expanding placement opportunities for the students.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://lbrce.ac.in/alumni/index.php

### **5.4.2 - Alumni's financial contribution during the year**

E. <2 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 an effective leadership in tune with the vision and mission of the Institution

The vision and mission statements define the institution distinctive characteristics in addressing the needs of stakeholders involved. In adherence to the above vision and mission as well as the norms of AICTE and UGC, college management has constituted a Governing body.

Statutory committees like Boards of Studies, Academic Council, Finance Committee, and other non-statutory committees involving faculty are constituted to help the administration.

The College Advisory Board (CAB) with the principal as the chairperson, frames the rules and regulations under the guidance of the Governing body and Academic council of the institution.

The Principal of the Institution, who is also a member of the

Trust Board of the Institution, discusses the broad components of the Perspective Plan of the Institution and it is then finalized in consultation with the Governing Body.

In the linear structure, Vice-Principal, Deans and Heads of the Department are next in the hierarchy. The Vice-Principal will assist the principal in administrative activities.

The HODs are next in hierarchy and are responsible for effective implementation of Teaching-Learning process and Curriculum development and all other day to day responsibilities of running the department.

The professors, Associate Professors, Assistant Professors are next in the hierarchy.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://lbrce.ac.in/administration_pages/o rganogram.php

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

The institution practices participative management and decentralization in all activities with a balance between transparency and confidentiality.

Case study: Curriculum Design

a). Module Coordinator Committee (MCC)

MCC receives inputs on curriculum revision from Class review committee (CRC).

b). Department Academic Committee (DAC)

It comprises of HOD and some senior faculty members of the department. The Program Coordinator initiates the curriculum design process by collecting the attainments of Course Outcomes, Program Outcomes and Program Specific Outcomes from the Program Assessment Committee (PAC). The inputs from various stakeholders such as Faculty, students, parents, Alumni and Employer will be considered for curriculum revision. DAC suggests the new and advanced courses to be introduced in the curriculum, establishment of new labs and skill upgradation facilities based on the requirement of the industry.

c). Board of Studies (BoS)

BoS comprises of senior Faculty of the department, members from Alumni, Industry, Academia, University nominee and functions with HOD as chairperson.

d). Academic Council (AC)

Academic Council comprises of HODs of all departments, Industry, Academia, University nominee, faculty nominated by principal and functions with principal as chairman.

All the faculty members are actively involved in Teaching-Learning process implementation.

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://lbrce.ac.in/administration_pages/o rganogram.php

#### **6.2 - Strategy Development and Deployment**

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

The institution has prepared a Strategic Plan in the year in 2018 for a duration of 5 years. The strategic goals of this Plan are classified into plans regarding

- Good governance
- Teaching-learning process
- Research and Development
- Internal Quality Assurance System through IQAC
- Institution Industry Interaction
- Financial management
- Staff Development & Welfare

- Student Development and Participation
- Alumni Interaction
- Community Services and Extension Activities
- Accreditations and Rankings

he implementation of the above plan resulted in the following.

- The highest package in the A.Y.2021-22has been improved to 14LPA from 10LPA
- Placements in MNCs have been improved
- Two Start-ups have emerged in the Incubation Centre
- Innovation Awards are bagged by students as part of our CIIE activities
- Student participation in extension activities resulted in our NSS Program Officer bagging the National, State level and University Level Awards
- Student participation in Extra-Curricular and Cultural activities resulted in bagging the awards at State and University Level.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://lbrce.ac.in/ranking_pages/lbrceran kings.php
Upload any additional information	<u>View File</u>

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

- The Institution has a well-structured administrative setup. The governing body is the highest decision-making body, which gives constructive suggestions to the management for effective decision making in line with the Vision, Mission of the institution. A suitable organogram is in place for deciding the administrative hierarchy of the institution.
- Various statutory and non-statutory committees are constituted for implementing an orderly functioning of the Institution under the guidance of the Principal. Following are the Statutory and Non-Statutory committees of our institution.

### Policies for the functional aspects of the Institution:

The Institution has a set of well-defined rules, policies and regulations defined within the framework of UGC, AICTE, State Government and Affiliating University. The Governing Body approves these policies. The service rules are formulated and these rules are periodically reviewed, updated and displayed on the college website.

- Grievance Redressal Policy
- Service Rules
- Code of Conduct
- Student Policy
- Energy Policy
- Environmental Policy
- Examination Policy
- Incubation & Start-up Policy
- Research Promotion Policy
- Industrial Consultancy Policy
- Library Policy
- IT Policy
- Maintenance Policy
- Training and Placement Policy
- Budget Policy
- Disabled-friendly, barrier free environment Policy

File Description	Documents
Paste link to Organogram on the institution webpage	https://lbrce.ac.in/administration_pages/o rganogram.php
Upload any additional information	<u>View File</u>
Paste link for additional Information	NA
6.2.3 - Implementation of e-gov areas of operation: Administra and Accounts Student Admission Support Examination	tion Finance

File Description	Documents
ERP (Enterprise Resource Planning) Documen	<u>View File</u>
Screen shots of user interfaces	<u>View File</u>
Details of implementation of e- governance in areas of operation	<u>View File</u>
Any additional information	<u>View File</u>

### **6.3 - Faculty Empowerment Strategies**

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

#### Welfare measures for teaching staff

- EPF facility
- Accident Policy Coverage of Rs.1 Lakh.
- Group Health Insurance Coverage of Rs.1.00 Lakh
- Providing Personal loans with corporate guarantee
- Salary advance to the needy staff
- Free/Concessional Transportation
- Free medical facility for common ailments
- Medical Leave
- Special Leave to for faculty to deliver guest lectures and to attend International Conferences/ Workshops/ FDPs/ STTPs/ Certification programs.
- Study Leave
- Financial assistance to attend International Conferences/ Workshops/ FDPs/ STTPs/ Certification Programs
- Advanced and licensed software are provided for enhancing the professional skill sets of the faculty.
- Creating facilities to pursue research activities with modern facilities
- Faculty are provided incentives for publications of textbooks for publishing professional/academic/technical articles in relevant engineering discipline.
- Seed money grant for pursuing minor research activities and supporting for experimental setup to pursue PhD.

Welfare measures for non-teaching staff

• Plots for Construction of Houses

- Gratuity
- 50% Tuition Fee Concession for Supporting Staff Children
- EPF facility
- Health Insurance Coverage of Rs.1.00 Lakh
- Accident insurance policy for drivers
- Financial assistance to technical staff to attend industrial training programs
- Free Medical Facility for Common Ailments
- Medical Leave
- Special Leave
- Salary Advance to the Needy Staff
- Providing Personal loans with corporate guarantee

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

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

42

File Description	Documents
Upload any additional information	<u>View File</u>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<u>View File</u>

### **6.3.3** - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<u>View File</u>
Upload any additional information	<u>View File</u>

### 6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

#### 210

File Description	Documents
Summary of the IQAC report	<u>View File</u>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>

### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

In every financial year the college will conduct internal audit through departmental staff as well as external audit by the statutory Auditors. The Finance Manager reviews the monthly transactions. While verifying entries, if any mistakes/ short comings identified/noticed the same could be rectified in the same month by the concerned departments. The internal financial audit is conducted at every quarter. The external statutory auditors shall visit the college office twice in a year for vouching audit and submitting the final audit report.

After completion, the final statutory audit report shall be submitted to the Governing body for approval. After approval, the financial accounts, documents could be used for all statutory purposes.

The mechanism of resolving audit objections are given below:

Internal Audit committee meet separately with an external and Internal auditor to discuss matters that the committee or auditors believe should be discussed privately. The committee reviews proposed audit approaches and handle coordination of the audit effort with internal audit staff. The findings of the Auditors are referred to the Audit Committee of the Institution. The Audit Committee goes through the findings and submits its remarks/responses to chairman of the Finance committee.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://lbrce.ac.in/quicklinks_pages/audit statements.php

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

0

File Description	Documents
Annual statements of accounts	<u>View File</u>
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<u>View File</u>
Any additional information	<u>View File</u>

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

The institution developed a strategy for mobilizing resources and ensures transparency in the financial management of the institution. It primarily depends on the Quality enhancement and the reputation of the Institution.

The following are the different ways of mobilizing the funds in the Institution.

### 1. Tuition fee

The major source of revenue generation is tuition fees collected from students. The appropriate fee is fixed, as per the norms, by Fee Regulatory Authority of Govt. of Andhra Pradesh depending on the accreditation of programs by NBA and NAAC and also the reputation of Institution and amount spent for the development of Institution.

2. Sponsored research and Consultancy

Funds are also mobilized through sponsored research projects from National funding agencies such as DST, UGC, AICTE, etc. and Non-Government agencies. Revenue generation through consultancy and material testing from Government and Non-Government sectors is another source of income to the Institution.

Optimal utilisation of resources:

An annual budget is prepared to ensure optimal utilisation of financial resources, based on the estimates received from the departments and functional units of the Institution.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://lbrce.ac.in/admission_pages/feestr ucture.php

### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

At LBRCE, the IQAC has contributed significantly for institutionalizing the quality assurance strategies and process in terms of

- Timely submission of AQAR
- Conduct of SSS
- Analysis of feedback from all stakeholders on quality related institutional processes
- Dissemination of information on quality parameters to all stakeholders
- Conduct of workshops, seminars on quality related themes
- Conduct of Pedagogy Training for improvement of teachinglearning
- Participation in institutional Accreditations and rankings.

The IQAC initiatives have resulted in the following two institutionalized practices as described below:

Initiatives to enhance skill set of the students

• Dedicated training programs for improving in terms of Soft Skills, Programming Skills and Technical Skills have been arranged for specific targeted students resulting in better placements. Dedicated centre for Career guidance and Training Team to train on programming and technical skills have been made available.

 Practical exposure through industrial visits, 04 weeks of case studies and 02 weeks of Industrial training is made mandatory in the new regulations.

Feedback mechanism & Appraisals:

- For every semester the feedback on course delivery is collected and analysed.
- Faculty appraisal is in place for the continuous improvement and up gradation of faculty competencies
- The annual appraisals collected will be scrutinized by IQAC committee members

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://lbrce.ac.in/igac/index.php

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

IQAC deployed standard structure and methodologies for the review of teaching learning process and learning outcomes at periodic intervals. Regarding the review of teaching learning process, the IQAC has setup the following practices at our institution.

(i)Internal Academic Audit:

In a semester, every department is audited thrice in every semester by two auditors from other departments nominated by the Chairperson of IQAC (Principal). The auditors will verify the following parameters and submit the compliance to IQAC / Dean of Academics.

(ii) Pedagogy Techniques for Effective Teaching Learning:

We have developed a strategy to retain the employees for relatively long period by clearly defining their roles and responsibilities and evaluate their performance by specifying Faculty Performance Index (FPI) on 10-point scale. This FPI is measured after completion of every semester with 60% weightage from student feedback analysis, 25% weightage from pass percentage in the course taught, and 15% weightage for all contributions at departmental, institution level and R&D.

IQAC directs all the HODs to select a set of teachers with FPI below 8 and conducts training programs for improving their teaching learning skills. The set also includes newly recruited less experienced teachers.

File Description	Documents						
Upload any additional information	<u>View File</u>						
Paste link for additional information	https://lbrce.ac.in/iqac/iqacevents.php						
6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any		A. Any 4 or all of the above					

other quality audit recognized by state, national or international agencies (such as

ISO Certification)

File Description	Documents
Paste the web link of annual reports of the Institution	https://lbrce.ac.in/iqac/iqacaqar.php
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	<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

a). Safety and Security:

- A secure parking lot nearer to Academic Blocks is earmarked for girl students.
- Separate Canteen space for girl students.
- Every Department has a girl's waiting room with required amenities.
- Separate and secured hostels are available for girl students within the campus.
- Wi-Fi enabled reading room is established in the women's hostel and also in the library.
- Women's grievance cell is functioning which takes care of issues of grievances and welfare of the women.
- Internal Complaints Committee (ICC) is also operating in the institution to safeguard the girl students.
- Security wing with 23 guards are placed in the campus and hostels.
- Timely medical assistance for girl students is available
- The institution has installed 150 Closed Circuit (CC) cameras to monitor the security and safety.

### b). Counselling:

Both general and individualised counselling has been accorded to the students. Health awareness programs for girl students are arranged in Hostels and during the induction program. Counselling programs are arranged for women safety by Saheli-The Girls Club which is associated with ICC

### c). Common Room:

Every Department has an exclusive waiting hall for girls with wash room facilities.

File Description	Documents						
Upload any additional information	<u>View File</u>						
Paste link for additional Information	https://www.lbrce.ac.in/clubs/saheli.php						
7.1.2 - The Institution has facili alternate sources of energy and conservation: Solar energy plant Wheeling to the Grid Se energy conservation Use of LEI power-efficient equipment	energy Biogas nsor-based	A. Any 4 or All of the above					

File Description	Documents
Geotagged 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 a maximum of 200 words)

The institution has Prakruthi-The Environmental Club to promote awareness on environmental issues such as protection, conservation, preservation, restoration. LBRCE signed a Memorandum of Understanding (MoU) with ITC to recycle and reuse the paper and cardboard waste generated in the campus.

Solid waste management:

Solid waste was given to authorized scrap agents for further processing. Sanitary napkins are disposed of using the incineration process.

The biological reusable waste is processed as organic manure for the plants in campus, while other solid wasteis dumped in the community bin of Mylavaram municipality.

Liquid Waste Management:

Wastage of drinking water is restricted through proper monitoring. Proper drainage system is found in all buildings of the campus

Waste Management:

The e-waste generated is being disposed to third party recyclers and the low configured computers are donated to nearby schools and institutions.

Waste Recycling System:

The amount of garbage sent to landfill for composting the organic matter is reused rather than being dumped. Wet waste from the canteen and hostels is collected and converted into compost.

Hazardous chemicals management:

Keeping in view of student safety as well as environmental protection, the Department of Chemistry fixes the concentrations of solutions to very low levels.

File Description	Documents							
Relevant documents like agreements/MoUs with Government and other approved agencies	<u>View File</u>							
Geotagged photographs of the facilities	<u>View File</u>							
Any other relevant information	<u>View File</u>							
7.1.4 - Water conservation facil in the Institution: Rain water h Bore well /Open well recharge of tanks and bunds Waste wate Maintenance of water bodies an system in the campus	harvesting Construction er recycling							
File Description	Documents							
Geotagged photographs / videos of the facilities	<u>View File</u>							
Any other relevant information	<u>View File</u>							
7.1.5 - Green campus initiatives	sinclude							
7.1.5.1 - The institutional initiat greening the campus are as foll		A. Any 4 or All of the above						
<ol> <li>Restricted entry of autor</li> <li>Use of bicycles/ Battery- vehicles</li> <li>Pedestrian-friendly path</li> <li>Ban on use of plastic</li> <li>Landscaping</li> </ol>	powered							
File Description	Documents							
Geotagged photos / videos of the facilities	<u>View File</u>							
	<u>View File</u>							
Various policy documents / decisions circulated for implementation								

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

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:	Α.	Any	4	or	all	of	the	above
<ol> <li>Green audit</li> <li>Energy audit</li> <li>Environment audit</li> <li>Clean and green campus recognitions/awards</li> </ol>								
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	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts	Α.	Any	4	or	all	of	the	above	
for easy access to classrooms and centres									
Disabled-friendly washrooms Signage									
including tactile path lights, display boards									
and signposts Assistive technology and									
facilities for persons with disabilities:									
accessible website, screen-reading software,									
mechanized equipment, etc. Provision for									
enquiry and information: Human assistance,									
reader, scribe, soft copies of reading									
materials, screen reading, etc.									

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

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

The institution has always been in the forefront of sensitising students to the cultural, regional, linguistic, communal and socioeconomic diversities of the state and the nation. In pursuit of achieving this goal, LBRCE is undertaking various initiatives such as conducting the birth anniversary of eminent personalities as well as National Festivals. NSS, NCC and Club activities provide an inclusive environment by bringing students and teachers with diverse backgrounds. These initiatives help in developing tolerance harmony towards cultural, regional, linguistic, communal, and socioeconomic diversities. Making the courses on Constitution of India and professional ethics mandatory to all UG programs is another initiative which contributes to the above goal.

Yoga classes are conducted for people in adopted village Ganapavaram to create awareness on health.

The institution always encourages the students to organise and participate in different Programs organised by our institution, other institutions at university and other government or nongovernment organization levels. This also sensitizes our students towards cultural, regional, linguistic, communal and socioeconomic diversities.

Kruthi - The Fine Arts and Cultural Club has been established to provide a platform for the students to bring out hidden talents.

NCC provides various local and national camps for their cadets to explore the 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>

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

Individuals with different backgrounds viz., cultural, social, economic, linguistic, and ethnic diversities comprise our citizens and they are governed and guided by the Constitution irrespective of caste and religion. Accordingly, it becomes necessary to sensitize students and employees about values, rights, duties and responsibilities of citizens. The expected awareness regarding values, rights, duties and responsibilities of citizens is declining among the students day by day. Accordingly, an effort is required by the institutions in this regard. The corresponding implementations by our institution are given below.

The students are inspired by participating in various programs on culture, traditions, values, duties, and responsibilities from prominent invited guest speakers. The institution establishes policies that reflect on core values. Code of conduct is prepared for students and staff which is to be obeyed by everyone. Moreover, institution conducts awareness programs on the ban on plastics, cleanliness, Swachh Bharat, etc. there by promoting value system among students.

The institution designed the curriculum with mandatory courses like "Professional ethics and human values", "Constitution of India" as a small step to inculcate constitutional obligations among the students.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	<u>View File</u>
Any other relevant information	<u>View File</u>
7.1.10 - The institution has a pr of conduct for students, teacher administrators and other staff	rs,

periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the 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 programmes, 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

The Institution is organizing the following national festival days and on great Indian leaders' birth anniversaries. India is worldwide known for its cultural diversity and colourful festivals.

Independence Day - 15th August:

Mother Teresa Birthday - 26th August:

Teacher day - 5th September:

Engineers day - 15th September:

The institution conducts Engineers' day celebrations every year on 15th September i.e., Sir Mokshagundam Visvesvaraya birth anniversary. During these celebrations, the students are encouraged to exhibit their creative technical models and are evaluated by judges from premier organizations. This event increases creative thinking in the young minds of engineering students. Gandhi Jayanti - 2nd October:

#### Rashtriya Ekta Diwas - 31st October:

#### Srinivasa Ramanujan Birthday -22nd December:

LBRCE NCC Cadets assist in "Srinivasa Ramanujan Birthday Celebrations

Telugu Bhasha Dinosthavam is celebrated every year on 29th August

Dr.K.L.Rao Birthday Celebrations on 15th July :

#### Republic Day -26th January:

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	<u>View File</u>
Geotagged 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 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

#### https://www.lbrce.ac.in/iqac/iqacbestpractices.php

File Description	Documents
Best practices in the Institutional website	https://lbrce.ac.in/iqac/iqacbestpractices .php
Any other relevant information	https://www.lbrce.ac.in/iqac/iqac_best_pra ctices/IQAC_BEST_PRACTICES_2021-22.pdf

### 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

"Giving Back to the Society and Environment"

The LBRCE is run by LBRCT which is well known for its philanthropic attitude in all its activities. The major thrust in all these activities is to improve the rural society in and around Mylavaram. Providing technical education of good standards to the young students at affordable level specifically happens to be one such important dimension. With this view LBRCE was established in the year 1998. Not only providing technical education but also many other dimensions are taken into consideration during the progress of LBRCE. Through these following activities some dimensions are taken care.

- Employability enhancement programs
- Fee concession to economically weaker students
- Financial support to incubate innovative ideas
- Generous rural development activities
- Adoption of nearby village

LBRCE is having a policy of adopting one nearby village every year to extend support to the nearby villages regularly to make them aware of certain basic skills and amenities. LBRCE NSS unitfrequently conduct medical checkups, drainage cleaning, exploring issues with open defecation, smoking, consumption of alcohol etc. In addition, utmost focus is given to 10th class students along with school dropouts by means of exploring the importance of education in the present context.

File Description	Documents
Appropriate link in the institutional website	https://lbrce.ac.in/nss/index.php
Any other relevant information	<u>View File</u>

7.3.2 - Plan of action for the next academic year

#### Academic Procedures

- Increasing number of smart class rooms and learning resources
- Reforming Academic and Administrative Audit Procedures
- Reforming financial planning
- Reforming administrative procedures through e-governance
- Reforming Self Appraisal Form
- Strengthening the documentation standards OBE Implementation Improvements

- Analyzing the quality of Mid and End Semester question papers by IQAC for further corrective actions
- Further strengthening of Teaching-Learning process

Research and Development

- Undertaking Major Projects and consultancy works
- Strengthening of research facilities in various specialized labs
- Improving seed money facility and incentives for research
- Increasing the number of journal and conference publications
- Encouraging faculty to apply for financial assistance from the outsources for organizing Seminars/ Conferences/ and research projects.
- Conducting International and National Conference

Skill Set Improvement of Students

- Planning to introduce series of programs, short term courses and some workshops and many such teaching learning activities in tune with the institute Mission.
- Enhancing English Communication and Programming Skills
- Planning to conduct skill development to serve the needs of the industry and the Nation.

Infrastructure and Extension Activities

- Improving the class room ambiance
- Adopting another nearby village