

# INSTITUTIONAL ASSESSMENT AND ACCREDITATION (Effective from July 2017)

Accreditation - (Cycle - 2)

# PEER TEAM REPORT ON

# INSTITUTIONAL ACCREDITATION OF LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

Mylavaram Andhra Pradesh 521230

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL An Autonomous Institution of the University Grants Commission P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA

# Section I:GENERAL INFORMATION

1.Name & Address of the	LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING		
institution:	Mylavaram		
	Andhra Pradesh		
	521230		
2.Year of Establishment	1998		
3.Current Academic Activities at			
the Institution(Numbers):			
Faculties/Schools:	1		
Departments/Centres:	10		
Programmes/Course offered:	14		
Permanent Faculty Members:	269		
Permanent Support Staff:	161		
Students:	4089		
4.Three major features in the	1. The institution has autonomy status and 5 undergraduate		
institutional Context	programmes have NBA accreditation under Tier-1		
(Asperceived by the Peer Team):	2. Adequate qualified Staff		
	3. Education provided to rural community by the location of the		
5.Dates of visit of the Peer Team	institution in a rural area From : 21-02-2022		
(A detailed visit schedule may be included as Annexure):	To: 22-02-2022		
6.Composition of Peer Team			
which undertook the on site visit:			
which undertook the on site visit.	Name	Designation & Organisation Name	
Chairperson	DR. VARINDER S KANWAR	Vice Chancellor, CHITKARA	
		UNIVERSITY HIMACHAL	
		PRADESH	
Member Co-ordinator:	DR. UTPAL SARMA	Professor, GAUHATI	
		UNIVERSITY	
Member:	DR. V LAKSHMIPRABHA	FormerPrincipal,GOVERNMENT	
	VISWANATHAN	COLLEGE OF TECHNOLOGY	
NAAC Co - ordinator:	Dr. Leena Gahane		
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## Section II:CRITERION WISE ANALYSIS

Observations (Strengths and/or Weaknesses) on each qualitative metrices of the key Indicator under the respective criterion(This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)

Criterion1 - Curricular Aspects (Key Indicator and Qualitative Metrices(QlM) in Criterion1)		
1.1	Curriculum Design and Development	
1.1.1	Curricula developed and implemented have relevance to the local, national, regional and	
QIM	global developmental needs which is reflected in Programme outcomes (POs), Programme	
	Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the	
	Institution.	
1.2	Academic Flexibility	
1.3	Curriculum Enrichment	
1.3.1	Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human	
QlM	Values ,Environment and Sustainability into the Curriculum	
1.4	Feedback System	

Qualitative analysis of Criterion 1

Lakireddy Balireddy College of Engineering, Mylavaram, Krishna District, Andhra Pradesh is an autonomous Institution affiliated to JNTUK Kakinada. The Institution offers 9 undergraduate programs, 4 Post graduate programs in Engineering and 1 MBA Program. The approved intake for undergraduate courses is 1020, for postgraduate courses 24 and 120 for the MBA . The College has been accredited by NAAC twice and now the institution is appearing for reassessment of the second cycle. The institution follows Choice Based Credit System and self-learning courses using MOOCs platform through SWAYAM, however its effectiveness requires enhancement allowing students to register for courses of their choice online.

The curriculum development is periodically carried out by taking feedback from stakeholders. The meetings of Board of Studies and Academic council are convened periodically for syllabus revision and minutes maintained by the institution. Different value-added courses are offered by various collaborative labs set up by industry/academia that includes APSSDC, CISCO, Dassault Systems, NI, European Centre for Mechatronics, IIT-B and IISc. Approximately, about a quarter of students undergo internships while others carry out academic projects within the institute.

Being an autonomous institution, the institution has freedom of formulating and revising its curriculum, evaluation methodology and making regular update.

The institute has successfully introduced professional ethics, gender equality, respect for human values, concerns about environment and sustainability in its curriculum as well as through establishment of an effective NSS unit wherein activities regarding such concerns are regularly organised.

The Postgraduate programs at the institute lacks even minimal registrations and thus requires further strengthening and promotion. In addition, it is evident that most students are from Andhra Pradesh and this demands for initiatives to improve Institutes peer rating and national outlook to attract students from all over the region and preferably all across the country.

Criterion?	- Teaching-learning and Evaluation (Key Indicator and Qualitative Metrices(QlM) in Criterion2)	
2.1	Student Enrollment and Profile	
2.2	Catering to Student Diversity	
2.2.1	The institution assesses the learning levels of the students and organises	
QlM	special Programmes for advanced learners and slow learners	
2.3	Teaching- Learning Process	
2.3.1	Student centric methods, such as experiential learning, participative learning and problem	
QlM	solving methodologies are used for enhancing learning experiences	
2.3.2	Teachers use ICT enabled tools including online resources for effective teaching and	
QlM	learning process.	
2.3.4	Preparation and adherence of Academic Calendar and Teaching plans by the institution	
QIM		
2.4	Teacher Profile and Quality	
2.5	Evaluation Process and Reforms	
2.5.3	IT integration and reforms in the examination procedures and processes including	
QIM	Continuous Internal Assessment (CIA) have brought in considerable improvement in	
	Examination Management System (EMS) of the Institution	
2.6	Student Performance and Learning Outcomes	
2.6.1	Programme and course outcomes for all Programmes offered by the institution are stated	
QlM	and displayed on website and communicated to teachers and students.	
2.6.2	Attainment of programme outcomes and course outcomes are evaluated by the institution.	
QIM		
2.7	Student Satisfaction Survey	

Institute has an annual intake of 1020 for the 9 undergraduate programs, 24 for the 4 Postgraduate programs and 120 for the MBA course. 5 of the undergraduate courses are NBA accredited with tier-I. The Institute has formulated its curriculum based on outcome-based education which is effectively implemented. These are disseminated to the stake holders through institutional website. The attainment of the objectives is calculated using the rubrics and steps have been taken to improve the attainment factor.

The Institute formulates its academic calendar in tune with the JNTUK Kakinada, the affiliating University. The faculty subsequently prepare the course delivery plan and course file. A procedure is in place for identifying slow learners. Bridge classes are conducted to meet the pre requisites for the courses. Remedial classes are conducted for slow learners to improve their learning levels. Fast learners are given opportunity to do project in industry and do online certificate courses.

Classrooms have projectors to facilitate ICT enabled learning. There are facilities to conduct laboratory experiments on a virtual mode in some of the courses. A media centre is in place for developing learning material as e-content.

All sanctioned teaching posts are filled. 80 out of the 269 permanent faculty have Ph.D. The average teaching experience of the faculty is 7.

The Institution has introduced certain reforms in the examination system. Examination system is managed by an ERP software. They have CCTV cameras and RFID locking to monitor and ensure security in the conduct of examinations. The pass percentage is encouraging. Percentage of students asking for revaluation is about

10%.

The Institute uses Mid Examination, Quiz examination, Semester End examination as metrics for evaluation. The attainment of PO and PSO is computed by Direct assessment and Indirect assessment. The overall PO and PSO attainment are calculated by considering 70% weightage for direct assessment and 30% of indirect attainment through surveys.

Criterion3	- Research, Innovations and Extension (Key Indicator and Qualitative Metrices(QlM) in	
Criterion3	)	
3.1	Promotion of Research and Facilities	
3.1.1	The institution's Research facilities are frequently updated and there is a well defined	
QIM	policy for promotion of research which is uploaded on the institutional website and	
	implemented	
3.2	Resource Mobilization for Research	
3.3	Innovation Ecosystem	
3.3.1	Institution has created an eco system for innovations, creation and transfer of knowledge	
QIM	supported by dedicated centers for research, entrepreneurship, community orientation,	
	Incubation etc.	
3.4	Research Publications and Awards	
3.5	Consultancy	
3.6	Extension Activities	
3.6.1	Extension activities are carried out in the neighbourhood community,-sensitising students to	
QIM	social issues, for their holistic development, and impact thereof during the last five years	
3.7	Collaboration	

Four Departments have been recognised by the affiliating University JNTUK for carrying out research work. A reasonable grant was received in the last five years for research from funding agencies. Only a few numbers of the teachers are having research projects. 44 research scholars are registered for doing PhD under recognised supervisors from the institution. The Publication count has improved significantly from 2018-19 to 2019-20 however, faculty members should publish more papers in SCI-Journals. Limited number of books have been authored by the faculty of the institution.

The research in the institution has to take a major leap. More strategies for improving research must be devised and faculty must be motivated towards research and publications. All Departments must obtain recognition for carrying out research from the affiliating University. PhD students must be enrolled which can give a boost to the research ambience in the campus.

The institute has Centre for Innovation, Incubation and Entrepreneurship. The centre is supporting innovation by students with some financial support. The centre has also been awarded for its activities and initiatives. For enhancing the start-up culture in the College, the Innovation and Incubation centre need to be more vibrant. The institute has some MoUs for carrying out collaborative activities. Students have got some awards for the innovative projects.

Seminars, workshops related to research methodology, Intellectual Property Rights Entrepreneurship, skill development are conducted by the institution.

The revenue generated by way of consultancy is very meagre. The institute has to focus on revenue generating models which can best work based on the strength of Departments and requirements in the area where the institution is located.

The institution has made good contribution in terms of Extension activities for neighbourhood community through the NSS and NCC wing. The Environmental protection activities, adoption of villages, public safety and awareness campaigns are few of them.

Criterion4	- Infrastructure and Learning Resources (Key Indicator and Qualitative Metrices(QlM) in	
Criterion4	)	
4.1	Physical Facilities	
4.1.1	The Institution has adequate infrastructure and physical facilities for teaching- learning.	
QlM	viz., classrooms, laboratories, computing equipment etc.	
4.1.2	The institution has adequate facilities for cultural activities, yoga, games and sports (indoor	
QlM	& outdoor); (gymnasium, yoga centre, auditorium, etc.,)	
4.2	Library as a Learning Resource	
4.2.1	Library is automated using Integrated Library Management System (ILMS)	
QlM		
4.3	IT Infrastructure	
4.3.1	Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for	
QlM	updating its IT facilities	
4.4	Maintenance of Campus Infrastructure	
4.4.2	There are established systems and procedures for maintaining and utilizing physical,	
QlM	academic and support facilities - laboratory, library, sports complex, computers, classrooms	
	etc.	

The institution has a land area of 65 acres catering to its academic requirements. It has adequate classrooms, tutorial rooms, seminar halls equipped with projectors and screens. In addition to the seminar Halls there is one auditorium for student centric activities. The laboratories are established as per the curriculum requirement and has adequate number of equipment maintained by technical supporting staff. However, the age-old experimental setups need to be replaced by state-of-the-art experiments in the phsaed manner. The Institute has established sports and Yoga facilities which has both indoor and outdoor sports provisions.

There are adequate number of computers and reprographic facilities. There is a centralized media facility for preparation of learning material and e-content for the benefit of students

The library has 61553 volumes with 12159 titles of books and 3400 back volumes of technical periodicals. The library subscribes around 6800 e-journals with hard copy of some National journals. Library lending is carried out through DELNET. OPAC is available for remote access. The institution has a Digital Library with 40 computers and can be accessed through LAN from any Department. The annual expenditure on books/ebooks is only around 25 lakhsCovid period. The usage of library by students and teachers needs improvement.

The internet bandwidth used is 1430 MBPS. There are sufficient servers with power backup. The campus network has security features and firewall protection. Surveillance cameras are placed all over the campus for monitoring purpose.

There is a budget allotment for campus maintenance for both the physical facilities and campus support facilities which is adequate. A procedure for maintenance of campus facilities is in place. The Institution has RO plant for providing purified drinking water to the students and employees. The college has canteen and bank within its premises. The campus is supported by 500KWp solar PV system. Cultural activities are also encouraged.

There are both Boys' and girls' hostels.

Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrices(QlM) in Criterion5)		
5.1	Student Support	
5.2	Student Progression	
5.3	Student Participation and Activities	
5.3.2	Presence of an active Student Council & representation of students on academic &	
QlM	administrative bodies/committees of the institution	
5.4	Alumni Engagement	
5.4.1	The Alumni Association / Chapters (registered and functional) contributes significantly to	
QlM	the development of the institution through financial and other support services.	

The Institute has established a mechanism to identify meritorious and needy students to provide support in some form. The Government of Andhra Pradesh provides scholarships to students from various sections of society namely SC/ST and OBC category of students. In addition, the institution also provides some scholarships to deserving students. The Institution has made provisions for capacity development and skill enhancement of students through organising soft skill training programs, language and communication skill labs in addition to overall development of students through sports and Yoga. There are Institution level clubs which support and nurture extra talent in students.

Student Grievance and Internal Committee are present to address such issues as and when they arise. Alumni meet is being organised every year. The Alumni contribute a small amount in the form of scholarships. They are members in the Board of Studies to help in the curriculum development, Considering the years of existence of the institution the Alumni participation needs improvement.

Criterio	n6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrices(QlM) in		
Criterio			
6.1	Institutional Vision and Leadership		
6.1.1	The governance of the institution is reflective of an effective leadership in tune with the		
QlM	vision and mission of the Institution		
6.1.2	The effective leadership is reflected in various institutional practices such as		
QlM	decentralization and participative management.		
6.2	Strategy Development and Deployment		
6.2.1	The institutional Strategic / Perspective plan is effectively deployed		
QlM			
6.2.2	The functioning of the institutional bodies is effective and efficient as visible from policies,		
QlM	administrative setup, appointment, service rules and procedures, etc.		
6.3	Faculty Empowerment Strategies		
6.3.1	The institution has effective welfare measures for teaching and non-teaching staff and		
QlM	avenues for career development/ progression		
6.4	Financial Management and Resource Mobilization		
6.4.1	Institution conducts internal and external financial audits regularly		
QlM			
6.4.3	Institutional strategies for mobilisation of funds and the optimal utilisation of resources		
QlM			
6.5	Internal Quality Assurance System		
6.5.1	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing		
QlM	the quality assurance strategies and processes visible in terms of – Incremental		
	improvements made for the preceding five years with regard to quality (in case of first		
	cycle)		
	Incremental improvements made for the preceding five years with regard to quality and		
	post accreditation quality initiatives (second and subsequent cycles)		
6.5.2	The institution reviews its teaching learning process, structures & methodologies of		
QlM	operations and learning outcomes at periodic intervals through IQAC set up as per norms		
	and recorded the incremental improvement in various activities		
	(For first evels Incremental improvements made for the preseding five years with record		
	(For first cycle - Incremental improvements made for the preceding five years with regard		
	to quality		
	For second and subsequent cycles - Incremental improvements made for the preceding five		
	years with regard to quality and post accreditation quality initiatives )		
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The Governing body of the institution is constituted by the college management who are involved in the decision making. The Principal of the institution is also a member of the Trust Board and decides the Perspective Institution plan in consultation with the Governing body.

The institution follows the guidelines issued by regulatory bodies like AICTE and JNTUK for curriculum design. The Institution has prepared a strategic plan in 2018 for a 5-year duration.

Staff recruitments are done by paper advertisement. Promotions are carried out as per performance. Teaching

staff have EPF, health insurance, accidental insurance personal loan, salary advance, free transport, medical leave, incentives for publications, study leave, and seed money for minor research activities. Financial support is extended to teachers to attend conferences, workshops, Faculty Development Programs have been organised and attended by faculty.

Non-teaching faculty have 50% tuition fee concession for supporting children education and gratuity in addition to leave, loan and salary advance.

Financial audit is conducted regularly.

IQAC is in place. Quality measures are taken to improve the academic performance keeping certain benchmark in mind. However, there is a scope of improvement in the IQAC functioning. A vibrant IQAC with a good vision and quality measures is envisaged for sustained quality improvement.

Criterion	7 - Institutional Values and Best Practices (Key Indicator and Qualitative Metrices(QlM) in	
Criterion		
7.1	Institutional Values and Social Responsibilities	
7.1.1	Measures initiated by the Institution for the promotion of gender equity during the last five	
QlM	years.	
7.1.3	Describe the facilities in the Institution for the management of the following types of	
QlM	degradable and non-degradable waste (within 500 words)	
	Solid waste management	
	Liquid waste management	
	Biomedical waste management	
	• E-waste management	
	Waste recycling system	
	<ul> <li>Hazardous chemicals and radioactive waste management</li> </ul>	
7.1.8	Describe the Institutional efforts/initiatives in providing an inclusive environment i.e.,	
QlM	tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and	
	other diversities (within 500 words).	
7.1.9	Sensitization of students and employees of the Institution to the constitutional obligations:	
QlM	values, rights, duties and responsibilities of citizens (within 500 words).	
7.1.11	Institution celebrates / organizes national and international commemorative days, events	
QlM	and festivals (within 500 words).	
7.2	Best Practices	
7.2.1	Describe two best practices successfully implemented by the Institution as per NAAC format	
QlM	provided in the Manual.	
7.3	Institutional Distinctiveness	
7.3.1	Portray the performance of the Institution in one area distinctive to its priority and thrust	
QlM	within 1000 words	

Initiatives are taken concerning safety and security of girl students. Girls' hostel, waiting rooms and medical assistance are provided to the girl students. Security watchman are provided in the hostels. An internal Complaints committee is constituted. Counselling is given to the needy girl students.

Alternate source of energy is provided through Solar PV panels. LED bulbs are used to conserve energy.

The environmental club in the campus promotes awareness about solid waste management Metal and scrap waste are given to scrap agents.

Rainwater harvesting system is present in the institute. As part of green campus initiatives, ban on plastics, restricted entry of auto mobiles, pedestrian friendly pathways are used. Various quality audits are also performed. The campus is disabled friendly by having ramps/lifts wherever needed, and friendly washrooms. Also, Human assistance like reader, scribe provided on need basis. However, the institution needs to adopt environment friendly practices to handle liquid and solid waste coming out of the campus.

The institution has mandatory courses like Professional Ethics and Human values and Constitution of India as a step to create awareness amidst students. Guest lectures are organised to promote Ethics, Values, duties and responsibilities. Apart from these National days like Independence Day, Republic Day are celebrated.

# Section III:OVERALL ANALYSIS based on Institutional strengths. Weaknesses, Opportunities & Challenges (SWOC) (up to 500 words)

# Strength:

- 1. Academic Autonomy
- 2. Visionary trustees
- 3. Adequate number of faculty and support staff
- 4. Outcome based Education adopted
- 5. Clean and green campus

# Weaknesses:

- 1.Locational Disadvantage
- 2.Limited Industry Institute collaborative activities
- 3. Research funding and publications less
- 4. Less placements and internship in core industry

# **Opportunities:**

- 1. Development of Innovation and Incubation centre
- 2. Interaction with Industry for research and consultancy
- 3. Higher number of supervisors for guiding PhD scholars
- 4. Map the programs with New Educational Policy
- 5. Increase placement by improving interships

# Challenges:

- 1. Availability of good quality students and faculty due to remote campus
- 2. Low intake in PG courses
- 3. Training of the students in key areas of Technology and improvement of soft skills
- 4. Training and placement of students of average quality
- 5. Motivational incentives to faculty to improve quality of publications

#### Section IV:Recommendations for Quality Enhancement of the Institution

(Please limit to **ten major ones** and use telegraphic language) (It is not necessary to indicate all the ten bullets)

- Strategic plan should be in place to enhance PG admissions and quality of research laboratories needs to be strengthened
- A robust long term vision plan needs to be prepared
- Stakeholders' involvement in decision making needs to be strengthened.
- There is a need for environmental conservations measures like sewage treatment plant, biogas plant.
- Additional support needs to be provided to students to promote co-curricular activities.
- Inclusion of industry-oriented value-added programs and exposure to industry needs to be strengthened
- Augmentation of laboratories infrastructure and computing facilities
- Existing faculty members maybe motivated to pursue Ph.D. and submit research projects, publish research papers in indexed journals
- Cadre ratio needs to be maintained as per UGC/ AICTE norms

### I have gone through the observations of the Peer Team as mentioned in this report

### Signature of the Head of the Institution

Seal of the Institution

Sl.No	Name		Signature with date
1	DR. VARINDER S KANWAR	Chairperson	
2	DR. UTPAL SARMA	Member Co-ordinator	
3	DR. V LAKSHMIPRABHA VISWANATHAN	Member	
4	Dr. Leena Gahane	NAAC Co - ordinator	

Place

Date

