

# LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

Accredited by NAAC with 'A' Grade and NBA (ECE,EEE,ME,CSE & IT)
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B.Reddy Nagar, Mylavaram-521230, N.T.R Dist, Andhra Pradesh, India.

Internal Quality Assurance Cell (IQAC)

-----

# **ACADEMIC AND ADMINISTRATIVE AUDIT (AAA) BY EXTERNAL AGENCY**

Date of Audit: 26-03-2022 ACADEMIC YEAR: 2020-21

\_\_\_\_\_

Audit Member-1: Dr.A. Venu Gopal, Professor, Mechanical Engineering, NIT. Warangal

Audit Member-2 : Dr.A.Subbarami Reddy, Professor, Department of ECE, JITS, Karimnagar

(The activities are to be graded on the following scale)

Excellent	Good	Satisfactory	Needs improvement
Α	В	С	D

# **Details of Programmes in the institution:**

	Name of the Programme	Sanctioned Seats	Students Admitted
	Artificial Intelligence & Data Science	64	64
	2. Aerospace Engineering	64	56
	3. Civil Engineering	64	58
	4. Computer Science and Engineering	193	192
UG: B.Tech.	5. Electronics and Communication Engineering	193	191
	6. Electrical and Electronics Engineering	128	123
	7. Information Technology	128	127
	8. Mechanical Engineering	128	102
	UG: B.Tech., Total	962	913
	Computer Science and Engineering	19	0
	2. Thermal Engineering	19	1
PG: M.Tech.	3. Power Electronics and Drives	19	0
	4. VLSI and Embedded Systems	19	1
	PG: M.Tech., Total	76	2
PG: MBA	5. Master of Business Administration	128	103
	PG: M.Tech. & MBA		105
	UG and PG Total	1168	1018

	I: Curricular Aspects	III	A 11 D	0 1
Metric. No	Description	HEIs i/p	Audit Remarks	Grade
1.1	Number of programmes offered during the year $(N_P)$	15	Curriculum is revised	
	Number of programmes where syllabus revision was carried out during the year (n <sub>P</sub> )	15	regularly as per the guidelines from	A
	Percentage of programmes where syllabus revision was carried out during the year $(n_p/N_P) \times 100$	100%	AICTE/APSCHE and JNTUK	
1.2	Number of courses in all programmes during the year $(N_C)$	608		
	Number of courses focusing on employability/entrepreneurship/skill development offered by the institution during the year $(n_C)$	494	All programmes are having focus on employability	A
	Percentage of courses focusing on employability/entrepreneurship/skill development offered by the institution during the year (n <sub>C</sub> /N <sub>C</sub> ) x 100	81.25%		
1.3	Number of new courses introduced across all programmes during the year $(N_{NC})$	146	New courses in line	A
	Percentage of new courses introduced across all programmes during the year (N <sub>NC</sub> /N <sub>C</sub> ) x 100	24%	with the developments in technology have been introduced	
1.4	Number of Programmes offered through Choice Based Credit System (CBCS)/ Elective Course System (N <sub>CBCS</sub> )	15	Choice Based Credit	Δ
	Percentage of Programmes offered through CBCS/ Elective Course System (N <sub>CBCS</sub> /N <sub>P</sub> ) x 100	100%	System is implemented in all the programmes	A
1.5	Number of value-added courses for imparting transferable and life skills offered during the year (Each with 30 or more contact hours)	15	Good	A
1.6	Total number of students during the year (N <sub>NS</sub> )	3972		
	Number of students enrolled in value-added courses $(N_{VA})$	978	Good	A
	Percentage of students enrolled in value-added courses (N <sub>VA</sub> /N <sub>NS</sub> ) x 100	24.6%	]	
1.7	Number of students undertaking field work/ projects/internships/student projects (N <sub>PI</sub> )	969	Students shall be promoted to undertake	
	Percentage of students undertaking field work/ projects/internships/student projects (N <sub>PI</sub> /N <sub>NS</sub> ) x 100	24.4%	field projects / internships	A

Metric. No	Description	HEIs i/p	Audit Remarks	Grade
1.8	Structured feedback and review of syllabus (Semester-wise/ year-wise) is obtained from (All 4/Any 3/2/1/None)	A11 4		
	Students	YES	Well established online	
	Teachers	YES	feedback system is in place	Α
	Employers	YES		
	Alumni	YES		
1.9	The feedback system of the institution comprises the following (Choose one).  A. Feedback collected, analysed and action taken made available on the website  B. Feedback collected, analysed and action taken  C. Feedback collected and analysed  D. Feedback collected  E. Feedback not obtained	A	Feedback is collected and analysed for further improvement of teaching-learning activity and also for curriculum revision.	A

- 1. Curriculum is being revised regularly in line with the guidelines issued by AICTE, APSCHE and JNTUK. Board of Studies meetings are organised regularly with the eminent people from Higher Education Institutions and industry of repute and also the senior alumni.
- 2. CBCS is in place and implemented.
- 3. Online Feedback system is in place and analysed for improving the Teaching-Learning process.
- 4. More students may be encouraged to undertake field projects / Internships.

Criterion II: Teaching-Learning and Evaluation								
Metric. No	Description	HEIs i/p					Audit Remarks	Grade
2.1	Student admission percentage $(n_{21}/N_{21}) \times 100$ where, $N_{21}$ : Total number of sanctioned seats $n_{21}$ : Total number of students admitted	UG PG Total	N <sub>21</sub> 962 203 1168	n <sub>21</sub> 913 105 1018	94. 94. 51. 87.	91 72	PG admissions are about 50%. However, UG admissions are very good.	A
2.2	Number of students admitted from the reserved category (SC,ST,OBC, Divyangian, etc.) (n <sub>22</sub> )  Number of seats earmarked for reserved category as per GOI or state government rule (N <sub>22</sub> )			73 14			Very good	A
	Percentage of seats filled against reserved categories (n <sub>22</sub> /N <sub>22</sub> )x100		90.0	)9%				
2.3	Total number of full-time teachers in the institution $(N_T)$		sors ate Profe ant Profe		1	42 34 162 238	Associate professors are less in number	A
2.4	Total number of students enrolled $(N_E)$		39	72				A
	Student-full time Teacher ratio $(N_E/N_T)$		16.6	9:1				A
2.5	Number of faculty Mentors (n <sub>25</sub> )		18	84				A
	Mentor-Mentee ratio (n <sub>25</sub> /N <sub>E</sub> )		1:2	21.6				
2.6	Number of sanctioned posts (n <sub>25</sub> )		2.	38				
	Percentage of full time teachers against sanctioned posts (n <sub>26</sub> /N <sub>T</sub> )x100		10	0%			Very good	A
2.7	Number of full-time teachers with Ph.D (n <sub>27</sub> )		6	<b>59</b>				
	No. of permanent faculty pursuing Ph.D		9	)4			Good	A
	Percentage of full-time teachers with Ph.D $(n_{27}/N_T)x100$		29	)%				
2.8	Total experience of full-time teachers in the same institution (n <sub>28</sub> )		1794	Years			Experienced	
	Average teaching experience of full- time teachers in the same institution $(n_{28}/N_T)$	S 54 Was as		Faculty in the same institution are available	A			

Metric. No	Description	HEIs i/p		Audit Remarks	Grade
2.9	Average number of days from the date of last semester-end examination till the declaration of results (N <sub>29</sub> )	Program/Sem B.Tech., I-Sem B.Tech., II-Sem B.Tech., III-Sem B.Tech., IV-Sem B.Tech., V-Sem B.Tech., V-Sem B.Tech., VI-Sem B.Tech., VI-Sem M.Tech., VII-Sem M.Tech., I-Sem M.Tech., I-Sem M.Tech., II-Sem MBA., I-Sem MBA., II-Sem MBA., II-Sem MBA., IV-Sem MBA., IV-Sem	N <sub>29</sub> 18 34 14 22 25 47 15 35 22 53 20 49 12 7 11	Remarks 	A
2.10	Total number of students appeared in the examination $(N_{210})$	Average 3907	25.6		A
	Number of complaints/grievances about evaluation(n <sub>210</sub> )	308			A
	Average percentage of student complaints/grievances about evaluation against total number of appeared in the examination (n <sub>210</sub> /N <sub>210</sub> )x100	7.9%			A
2.11	Total number of final year students who passed the examination(n <sub>211</sub> )	1014			А
	Total number of final year students who appeared for the examination $(N_{211})$	1013		Very good	A
	Pass percentage of Final year students $(n_{211}/N_{211})x100$	99.9%		Very good	A

Metric. No	Description	HE	Is i/p		Audit Remarks	Grade
2.12	Quality analysis of Mid and End Semester examination question papers	Standard Procedures are established			Good	A
2.13	Weightage of internal and external marks in R17 & R20 Regulations	UG-Internal UG-External PG-Internal PG-External	R17 40 60 40 60	R20 30 70 40 60	As per university norms	A
2.14	Credits for award of degree in R17 & R20 Regulations	B.Tech M.Tech MBA	R17 176 72 88 124	R20 160 68 108	As per AICTE guidelines	A
2.15	Number of credits for project work in R17 and R20 Regulations	Program B.Tech M.Tech MBA MCA	R17 12 26 6 12	R20 12 24 4		A
2.16	Status of automation of Examination division along with approved Examination Manual	100% automation of entire division & implementation of Examination Management System (EMS)				A
2.17	Preparation and adherence to Academic Calendar and Teaching plans by the institution	Academic calend academic activiti academic calend	ies are a	1		A
2.18	Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences	Workshops Certification Programmers	on Prog	grams are  15 15 13 21  actively NPTEL  EL 303  are lent		A

Metric. No	Description	HEIs i/p	Audit Remarks	Grade
2.19	Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed on website and communicated to teachers and students	Yes	All are well defined and displayed at prominent locations in the institute	A
2.20	Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution	Yes	Attainments are good	A
2.21	Teachers use ICT enabled tools including online resources for effective teaching and learning process	<b>Yes</b> , teachers are using ICT facilities	Yes	A
2.22	The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners	Bridge classes for Lateral Entry and First Year Late admitted students. Remedial Classes for slow learners and backlog students. GATE Classes for Advanced Learners	Very good initiatives addressing both the slow and fast learners	A
2.23	Student Satisfaction Survey (SSS)	2020-21		
	Total number of students on rolls (N <sub>220</sub> )	3949		
	Number of students participated in SSS(n <sub>220</sub> )	3000		A
	Percentage of students participated in SSS (n <sub>220</sub> /N <sub>220</sub> ) x 100	75.97%		
	Grade Point Average (GPA) on 4-point scale	3.39		

- 1. Outcome Based education philosophy is being followed very meticulously and the attainments are also calculated systematically.
- 2. Institute is encouraging faculty to pursue PhDs with reputed institutes by providing necessary financial support to purchase required equipment for carrying out their experimental/simulation works.
- 3. Question paper auditing may be carried out by the external subject experts.
- 4. Summer internships, two months each, at the end of 2<sup>nd</sup> year and also 3<sup>rd</sup> year is made mandatory for the UG students in the revised curriculum.
- 5. Opportunity is also provided for the students to carryout internships in the final semester.

Criterion	III: Research, Innovation and Ex	tension		
Metric. No	Description	HEIs i/p	Audit Remarks	Grade
3.1	Seed money provided by the institution to its teachers for research during the year	Rs.1,58,710/-	Good initiative	A
3.2	Grants received from Government and non- governmental agencies for research projects, endowments, Chairs in the institution	Rs. 26,73,934/-	The grants received from external agencies is minimum.	С
3.3	Total number of teachers having research projects (n <sub>33</sub> )	10	The faculty shall be motivated to apply for	С
	Percentage of teachers having research projects (n <sub>33</sub> /N <sub>T</sub> )x100	4.2%	more projects.	
3.4	Number of teachers recognised as research guides (n <sub>34</sub> )	35	Cood	В
	Percentage of teachers recognised as research guides (n <sub>34</sub> /N <sub>T</sub> )x100	14.7%	Good	Б
3.5	Number of departments having Research projects funded by government and non-government agencies (n <sub>35</sub> )	6	Good. But the number of projects in each department are to be enhanced.	
	Total number of departments (N <sub>35</sub> )	10		В
	Percentage of departments having Research projects funded by government and non-government agencies (n <sub>35</sub> /N <sub>35</sub> )x100	60%		
3.6	Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), entrepreneurship and skills development	54	Very good	A
3.7	Number of teachers recognized as guides (N <sub>37</sub> )	35		
	Number of Ph.D scholars registered (n <sub>37</sub> )	44	Good	A
	Number of Ph.D scholars registered per teacher $(n_{37}/N_{37})$	1.26		
3.8	Number of publications in UGC notified journals (n <sub>38</sub> )	154	No. of publications per faculty is less and	
	Number of research papers per teacher in the Journals notified on UGC website $(n_{38}/N_T)$	efforts must be	efforts must be put in to enhance this.	В
3.9	Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings (n <sub>39</sub> )	59		A
	Number of books and chapters in edited volumes / books published per teacher $(n_{39}/N_T)$	0.25		

	Total number of citations in Scopus	228		
	h-index of Scopus	18		
3.10	Revenue generated from consultancy and corporate training	Rs.1,180/-	Very less	С
3.11	Total number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / recognised bodies	175		A
3.12	Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc. (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)	28		В
3.13	Total number of students participating in extension activities (n <sub>313</sub> )	2969		
	Percentage of students participating in extension activities (n <sub>313</sub> /N <sub>E</sub> ) x100	74.75%	a	
3.14	Total number of Collaborative activities for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work	1014	Good	A
3.15	Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. (only functional MoUs with ongoing activities to be considered)	11	Good	A

- 1. Though the quality publications seem to be good. However, number of publications have to be increased.
- 2. Sponsored research and consultancy are limited. The faculty members shall be motivated by giving some financial benefits.

Metric. No	Description	HEIs i/p	Audit Remarks	Grade
4.1	Total number of classrooms/ seminar halls in the institution $(N_{41})$	73		
	Number of classrooms and seminar halls with ICT facilities (n <sub>41</sub> )	73		A
	Percentage of classrooms and seminar halls with ICT-enabled facilities such as smart class, LMS, etc. (n <sub>41</sub> /N <sub>41</sub> )x100	100%		
4.2	Total expenditure, excluding salary (N <sub>42</sub> )	Rs.8,42,72,000/-		
	Expenditure for infrastructure augmentation, excluding salary (n <sub>42</sub> )	Rs.1,78,62,400/-	Facilities are being	A
	Percentage of expenditure for infrastructure augmentation excluding salary (n <sub>42</sub> /N <sub>42</sub> )x100	21.2%	enhanced regularly	
4.3	Annual expenditure for purchase of books/ e-books and subscription to journals/e- journals	Rs.23,47,654/-	Good	A
4.4	Total number of teachers and students (N <sub>44</sub> )	4210		
	Number of teachers and students using library per day over one year (n <sub>44</sub> )	350		A
	Percentage per day usage of library by teachers and students (foot falls and login data for online access) (n <sub>44</sub> /N <sub>44</sub> )x100	8.3%		
4.5	Total number of Students (n <sub>45</sub> )	3972		
	Total number of Computers for academic purpose (N <sub>45</sub> )	1342	Very good	A
	Student-Computer ratio (n <sub>45</sub> /N <sub>45</sub> )	2.96:1		
4.6	Bandwidth of internet connection in the institution	880 Mbps	Very good	A

Metric. No	Description	HEIs i/p	Audit Remarks	Grade
4.7	Facilities available for e-content development (All 4/only 3/2/1/None)	A11 4		
	Media centre	Y		
	Audio visual centre	Y	All facilities are available	Α
	Lecture Capturing System (LCS)	Y		
	Mixing equipment and software's for editing	Y		
4.8	Total expenditure excluding salary component (N <sub>48</sub> )	Rs.8,42,72,000/-		
	Expenditure on maintenance of physical and academic support facilities excluding salary component (n <sub>48</sub> )	Rs.6,64,09,000/-	Good	A
	Percentage expenditure incurred on maintenance of physical and academic support facilities excluding salary component (n <sub>48</sub> /N <sub>48</sub> )x100	78.8%	Substantial increase compared to last year	
4.9	Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities	IT policy on expansion of IT infrastructure in the campus is available		A
4.10	The institution has adequate facilities for teaching – learning, viz., classrooms, laboratories, computing equipment, etc.	Available		A
4.11	The institution has adequate facilities for sports, games (indoor, outdoor, gymnasium, yoga centre etc.,) and cultural activities	Indoor stadium, outdoor sports facilities, gymnasium, yoga centre and enough space for cultural activities is available.	All facilities with good infrastructure are available	A

- 1. A media centre may be developed with all the video and audio recording facilities for recording the lectures and developing the e-content.
- 2. The campus is fully Wi-Fi enabled.
- 3. Classrooms are equipped with Wi-Fi and LCD projectors.

Criterion	V: Student Support and Progression			
Metric. No	Description	HEIs i/p	Audit Remarks	Grade
5.1	Number of students benefited by scholarships and freeships provided by the Government (n <sub>51</sub> )	2316		A
	Percentage of students benefited by scholarships and freeships provided by the Government $(n_{51}/N_E)$ x100	58.31%		
5.2	Number of students benefited by scholarships, freeships, etc provided by the institution and non-government agencies (n <sub>52</sub> )	26	More awards may be initiated	В
	Percentage of students benefited by scholarships, freeships, etc provided by the institution and non-government agencies (n <sub>52</sub> /N <sub>E</sub> ) x100	0.65%	for motivation of the students.	
5.3	Following Capacity development and skills enhancement activities are organised for improving students' capability (All 4/only 3/2/1/None)	All 4		
	Soft skills	Soft Skill training classes are conducted through dedicated CCGT		
	Language and communication skills	Yes		
	Life skills (Yoga, physical fitness, health and hygiene)	Full time Yoga master is available and conducting certification courses  Co-curricular and Extra Curricular activities are made as mandatory.	Very good  d r e s n d s	A
	Awareness of trends in technology	Certification courses and workshops on emerging areas and latest technologies are conduction regularly.		
5.4	Number of students benefited by guidance for competitive examinations and career counselling offered by the institution (n <sub>54</sub> )	3972	Very good	A
	Percentage of students benefited by guidance for competitive examinations and career counselling offered by the institution $(n_{54}/N_E)$ x100	100	Very good	11

Metric. No	Description	HEIs i/p	Audit Remarks	Grade
5.5	Number of outgoing students (N <sub>55</sub> )	1014	Efforts are to	
	Number of outgoing students placed (n <sub>55</sub> )	445	be made to increase the	В
	Percentage of placement of outgoing students $(n_{55}/N_{55})$ x100	43.9%	placements in core sector	
5.6	Number of final year students- previous graduating batch (N <sub>56</sub> )	1030		
	Number of outgoing students progressing to higher education- previous graduating batch (n <sub>56</sub> )	21		В
	Percentage of student progression to higher education- previous graduating batch (n <sub>56</sub> /N <sub>56</sub> ) x 100	2.04%		
	Number of students appeared in state/ national/ international level examinations (eg:IIT/JAM/NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/ IELTS/ Civil Services/State government examinations, etc) (N <sub>57</sub> )	173		
	Number of students qualified in state/ national/ international level examinations (eg:IIT/JAM/NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/ IELTS/ Civil Services/State government examinations, etc) (n <sub>57</sub> )	GATE       16         GRE       28         GMAT       2         IELTS       18         TOEFL       10         State Govt.       4         Total       78		В
	Percentage of students qualified in state/ national/ international level examinations (eg:IIT/JAM/NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/ IELTS/ Civil Services/State government examinations, etc) (n <sub>57</sub> /N <sub>57</sub> )x100	43.8%		
	Number of awards/medals for outstanding performance in sports/cultural activities at interuniversity / state /national / international events (award for a team event should be counted as one)	0	Poor, may be because of the pandemic	С
	Number of sports and cultural events / competitions organised by the institution	0	Poor, may be because of the pandemic	С
5.10	Alumni financial contribution	Rs.70,312/-		В

- 1. Career guidance for the students encouraging towards higher studies is provided for fast learners
- 2. Interactions with alumni shall further be increased. Alumni base needs to established.

Criterion VI: Governance, Leadership and Management					
Metric. No	Description	HEIs i/p	Audit Remarks	Grade	
6.1	Implementation of e-governance in areas of operation (All 4 / only 3 / 2/ 1 / None)	All 4			
	Administration	YES	MIS is in place		
	Finance and Accounts	YES		Α	
	Student Admission and Support	YES			
	Examination	YES			
6.2	Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies (n <sub>62</sub> )	13	Very less number of teachers utilised this opportunity compared to the last year. This may be because of the pandemic	Δ	
	Percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies (n <sub>62</sub> /N <sub>T</sub> )x100	5.46%		A	
6.3	Total number of professional development/ administrative training programmes organized by the institution for teaching and non-teaching staff	20		A	
6.4	Total number of teachers attended professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes (n <sub>64</sub> )	221	Very good		
	Percentage of teachers undergoing online/face-to-face Faculty Development Programmes (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc) (n <sub>64</sub> /N <sub>T</sub> ) x 100	92.86%		A	
6.5	Quality assurance initiatives of the institution include(All 4/only 3/2/1/None)	All 4			
	Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements	YES	IQAC cell is well established and		
	Collaborative quality initiatives with other institutions	YES	conducts regular meetings for		
	Participation in NIRF	YES	quality assurance.		
	Any other quality audit recognized by state, national or international agencies (ISO Certification)	Yes, ISO: 9001-2015			

Metric. No	Description	HEIs i/p	Audit Remarks	Grade
6.6	The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution	Governing body meetings are conducted twice in a year to ensure institute activities.		A
6.7	The institution has effective welfare measures for teaching and non-teaching staff and avenues for career development/ progression	Welfare measures EPF facility, Health Insurance, Concessional, Transport, Free medical facility, Gratuity to supporting staff and fee concession for staff children		A
6.8	Institution conducts internal and external financial audits regularly	YES Internal financial audit is done quarterly and External Financial audit is conducted from 22-06-2020 to 27-06-2020.		A
6.9	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes	Contributions of IQAC  Documentation of the activities leading to quality improvement  Periodical conduct of Academic and Administrative Audit and its follow-up  Preparation and submission of the Annual Quality Assurance Report (AQAR).  Collection and analysis of feedback from all stakeholders  Dissemination of information on various quality parameters to all stakeholders  Organization of inter and intra institutional workshops, seminars on quality related themes.  Development and application of quality benchmarks		A

Metric. No	Description	HEIs i/p	Audit Remarks	Grade
6.10	The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms	Every month internal audits are conducted through IQAC on Teaching & Learning Process in the campus		A
6.11	The institution practices decentralization and participative management	Proactive and participative management is in place. Administrative hierarchy is ensured by governing body.		A
6.12	Perspective/Strategic plan and deployment documents	Selective agenda items of strategic plan are discussed in governing body meeting and decisions are circulated to all the departments.		A

- 1. Management is very pro-active and participative.
- 2. Institute conducts internal and external audits regularly
- 3. IQAC is very well organised in collecting the information and providing necessary inputs to all the stakeholders for the improvement in teaching-learning and Institute governance activities.

Metric. No	Description	HEIs i/p	Audit Remarks	Grade
7.1	The Institution has facilities for alternate sources of energy and energy conservation measures (Any 4 or all 5/3/2/1/None)	4		
	Solar energy	YES 400kVA Solar PV system is established	1	
	Biogas plant	NO	Institute has very good alternate sources of	Α
	Wheeling to the Grid	YES	energy facilities.	
	Sensor-based energy conservation	YES		
	Use of LED bulbs/ power efficient equipment	All outdoor lamps are replaced with LED lights in the Campus		
7.2	Water conservation facilities available in the Institution (Any 4 or all 5/3/2/1/None)	4		
	Rain water harvesting	YES	Institute has sood	
	Borewell /Open well recharge	YES	Institute has good water harvesting	Α
	Construction of tanks and bunds	YES	facilities except waste water recycling	
	Waste water recycling	NO		
	Maintenance of water bodies and distribution system in the campus	YES		
7.3	Green campus initiatives (Any 4 or all 5/3/2/1/None)	All 5		
	Restricted entry of automobiles	YES		
	Use of Bicycles/ Battery powered vehicles	YES	Campus is fully green	A
	Pedestrian Friendly pathways	YES	covered	Α
	Ban on use of Plastic	YES		
	landscaping with trees and plants	YES		

Metric. No	Description	HEIs i/p	Audit Remarks	Grade
7.4	Quality audits on environment and energy are regularly undertaken by the institution (Any 4 or all 5/3/2/1/None)	4	Environment and Energy audits are	
	Green audit	YES		
	Energy audit	YES		
	Environment audit	YES		Α
	Clean and green campus recognitions/awards	NO	regularly done	
	Beyond the campus environmental promotional activities	YES (Through LBRCE NSS unit)		
7.5	The Institution has disabled-friendly, barrier free environment (Any 4 or all 5/3/2/1/None)	A11 5		
	Built environment with ramps/lifts for easy access to classrooms.	YES	Facilities like ramps, lifts, washrooms, etc. are available wherever necessary.	
	Disabled-friendly washrooms	YES		
	Signage including tactile path, lights, display boards and signposts	YES		A
	Assistive technology and facilities for persons with disabilities (Divyangan) accessible website, screen-reading software, mechanized equipment	YES		
	Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading	YES		
7.6	The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard (All 4 / Any 3 / 2/ 1 / None)	All 4		
	The Code of Conduct is displayed on the website	YES	Mechanisms to monitor discipline, code of conduct are well in place	A
	There is a committee to monitor adherence to the Code of Conduct	YES		
	Institution organizes professional ethics programmes for students, teachers, administrators and other staff	YES		
	Annual awareness programmes on Code of Conduct are organized	YES		
7.7	Measures initiated by the Institution for the promotion of gender equity	YES		A

Metric. No	Description	HEIs i/p	Audit Remarks	Grade
	Institution celebrates / organizes national and international commemorative days, events and festivals	YES		A
7.9	Best practices successfully implemented by the Institution	YES		A
7.10	Best Practices			

# Best Practice – I

#### Title of the Practice:

Effective Implementation of Outcome Based Education (OBE) in Teaching-Learning Process

#### **Objectives of the Practice:**

- ➤ To address the learning levels of students and make teaching more student centric.
- > To guide the faculty towards better planning in teaching-learning methodologies.
- ➤ To augment effective knowledge transfer through core, elective courses in addition to integrated learning practices.
- ➤ To enhance critical thinking, problem solving skills among students.
- ➤ To enrich technical skills through modern tools usage.
- To improve self-learning capabilities through MOOCs.
- To enrich the curriculum that suits to current industrial needs.

#### **Evidence of Success:**

- ➤ 80.34 % of UG B.Tech. students have successfully graduated and among them 48.27% of students have graduated without any backlogs
- > 75.74 % of UG B.Tech students have graduated with First class with Distinction.
- ➤ Overall student satisfaction has been improved. The Student Satisfaction Survey on the Teaching-Learning is at a level of 3.68 on 4-point scale.
- ➤ 02 Start-ups are registered, and 13 prototypes have been developed.

#### Some of the achievements are listed below:

- ➤ ARIIA 2021 Rankings: "BAND EXCELLENT" (Private/Self-Financed)
- ➤ Internshala Rankings 2021:
  - ✓ All India Ranking: 340
  - ✓ Zonal Rank: 134
- ➤ Outlook ICARE 2021 Magazine Survey:
  - ✓ 101-250 Rank Band
- ➤ Dataquest T Schools Survey 2021:

- ✓ 74 Rank (Among all Govt. and Private Colleges)
- ✓ 62 Rank (Among all Private Colleges)
- ➤ Dataquest Digital Index 2020: 35<sup>th</sup> Rank
- ➤ AAA+ grade awarded by Careers 360 (2020)
- ➤ 2.5 STAR Rating to CIIE by MHRD Institution's Innovation Cell
- ➤ Improved placement offers through skill centers (A.Y.2019-20: 524 to A.Y.2020-21: 756) and improvement in annual CTC.
- ➤ Publications have been improved from 43(A.Y:2015-16) to 465 (A.Y:2019-20) in quality journals

# Best Practice – II

#### Title of the Practice:

Ensuring holistic development of students

#### **Objectives of the Practice:**

- > To nurture the technical skills through department specific professional bodies and technical clubs.
- To explore inherent skills of students through National Level Technical and Cultural Symposia
- To enhance student's physical and psychological competence by games, sports and yoga.
- > To understand the importance community services and enhance social empathy by NSS activities.
- ➤ To make student a responsible citizen with ideal qualities like character, courage, comradeship, discipline, leadership, secular outlook, spirit of adventure.

#### **Evidence of Success:**

- ➤ NSS Unit conferred with "National Service Scheme award" by Ministry of Youth Affairs and Sports, Govt. of India for the year 2019-20
- ➤ Recognized as "Beat Covid Campaign College" by Mahatma Gandhi National Council of Rural Education (MGNCRE)
- ➤ Program Officer Dr. P. Ashok Reddy received "National Service Scheme Award 2019-20" from Hon'ble President of India on 24-09-2021.
- Lt. V. Likhita, ANO received Gold Medal in PRCN COURSE SW- 108 held at OTA Gwalior, Madhya Pradesh from 26-07-2021 to 23-10-2021
- ➤ Received "Dassault Systems Project of the year 2020" for the Project "Healthy Washing Machine" from Sri. Ch. Madhusudhan Reddy, Chairman, APSSDC and Prof. D.V. Rama Koti Reddy, Executive Director, APSSDC.

- ➤ Ms. K. Naga Divya Sri, received "Best Student in Holder in Entire Andhra Pradesh" for Handwriting Competition held on the occasion of releasing DISHA App on 29<sup>th</sup> June 2021 from Prof. K. Hema Chandra Reddy, Chairman, APSCHE.
- ➤ Ms. K. Poojitha Gayathri (EEE) bagged 1<sup>st</sup> Place in Patriotic Poem event in NSS State Youth Festival Competitions -2020
- ➤ Sk. Vanhar Ali, participated in NSS National Youth Festival during 12-16, Jan 2020 at Uttar Pradesh
- ➤ Ms. G. Baby Sindhuja got "Best Computer Science Engineering Student 2019" award by ISTE A.P Section State.
- ➤ Received a cash prize of 1 Lakh for participating in HEXAGON MSC virtual conference 2020 conducted on 2<sup>nd</sup> 3<sup>rd</sup> December 2020
- ➤ A project "Wearable Antennas for Health Care" was published in AICTE Chhatra Vishwakarma Award (CVA) booklet 2020
- > Secured "Runners" position JNTUK, Kakinada Football (Men) Intercollegiate Tournament-2021.
- ➤ Mr. J.D.V. Prasad, Yoga Trainer, bagged "Gold Medal" in the 34th A.P. State Yogasana Championship 2021.
- ➤ Ms. V. Akshara (II ECE) Participated in Second world Kuchipudi Dance Festival in Solo and Group dance held during 22nd to 24th October 2021 Organized by Kuchipudi Art Academy, Chennai.

- 1. Efforts may be put in to motivate the faculty to apply research projects for funding from Govt./external agencies.
- 2. A media centre may be developed with all the video and audio recording facilities for recording the lectures and developing the e-content
- 3. Interactions with alumni shall further be increased. Alumni base needs to increased.
- 4. Question paper auditing may be carried out by the external subject experts

Dr. A. Venu Gopal Professor (HAG) Dept. of Mech. Engg.,

N.I.T. Warangal

Mobile No.: 9493318537

Dr. A. Subbarami Reddy Professor Department of ECE

J.I.T.S., Karimnagar

Mobile No.: 9441990530