

# Yearly Status Report - 2019-2020

Part A		
Data of the Institution		
1. Name of the Institution	GUDLAVALLERU ENGINEERING COLLEGE	
Name of the head of the Institution	Dr. POTLURI RAVINDRA BABU	
Designation	Principal	
Does the Institution function from own campus	Yes	
Phone no/Alternate Phone no.	08674273737	
Mobile no.	9848779124	
Registered Email	principal@gecgudlavalleru.ac.in	
Alternate Email	office@gecgudlavalleru.ac.in	
Address	SESHADRI RAO KNOWLEDGE VILLAGE Penjendra Road Gudlavalleru	
City/Town	Gudlavalleru	
State/UT	Andhra Pradesh	
Pincode	521356	

2. Institutional Status		
Affiliated / Constituent	Affiliated	
Type of Institution	Co-education	
Location	Rural	
Financial Status	Self financed	
Name of the IQAC co-ordinator/Director	Dr. M. Kamaraju	
Phone no/Alternate Phone no.	08674273737	
Mobile no.	9849157394	
Registered Email	principal@gecgudlavalleru.ac.in	
Alternate Email	office@gecgudlavalleru.ac.in	
3. Website Address		
Web-link of the AQAR: (Previous Academic Year)	https://gecgudlavalleru.ac.in/images/admin/pdf/1604466593_AOAR%202018-19%20Submission%20Final.pdf	
4. Whether Academic Calendar prepared during the year	Yes	
if yes,whether it is uploaded in the institutional website: Weblink :	https://gecgudlavalleru.ac.in/academic_calendar.php	
5. Accrediation Details		

#### 5. Accrediation Details

Cycle	Grade	CGPA	Year of Accrediation	Vali	dity
				Period From	Period To
1	A	3.07	2016	29-Mar-2016	28-Mar-2021

# 6. Date of Establishment of IQAC 02-Jul-2014

# 7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture			
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries	

FDP on Effects of Soil Structure Interaction on Structures against Static and Dynamic Loads	03-Feb-2021 6	60
Workshop on Applied Research on Renewable Energy Sources and Micro grids	18-Nov-2019 6	29
Workshop on Applied Research in Electrical Vehicle Technologies	15-Jun-2020 6	29
Online FDP on Recent Trends in Mechanical Engineering	15-Jun-2020 6	330
FDP on Design and Analysis of Experiments	30-Aug-2019 1	50
Workshop on Advanced Development Tools Based IoT	11-Nov-2019 3	36
FDP on Data Acquisition and RT using LABVIEW	25-Nov-2019 6	42
FDP on Challenges and Advancements in the Design of IoT, Embedded and VLSI systems:A Researchers View (CADIEVR-2020)	08-Jun-2020 6	225
5-Day FDP on Sales Force Essentials for Business Specialists	05- <b>A</b> ug-2019 5	11
FDP on Data Science and Big Data Analytics	11-Sep-2019 4	2
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# 8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Departmen t/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Nil Nil		Nil	2020 0	0
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9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	<u>View File</u>
10. Number of IQAC meetings held during the	3

year:	
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	View File
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

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

Arranging Faculty Development Programs on written and oral English communication to the newly admitted faculty.

Conducting workshops on latest technologies for faculty and students, like IOT, Big Data Analytics.

Providing Hands-on Training on latest software tools to the students.

Conducting workshops on Outcome Based Education.

Arranging skill development programs to the students.

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# 13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Plan of Action	Achivements/Outcomes	
More awareness on Bloom's Taxonomy	Most of the faculty are preparing question papers for the students in the directions of Bloom's Taxonomy execution.	
Teaching - Learning innovative methods	subject in effective manner.	
Conduct skill development programs for the students	Students are succeeded in campus placements	
Organize the International conference in emerging areas	Some of the departments come forward to conduct the Conference with possible publication in scopus indexed	
Industrial training for the faculty	Faculty attending industrial training programs during summer vacation.	
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body?	
Name of Statutory Body	Meeting Date
Academic Council	24-Apr-2021
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	Yes
Date of Visit	27-Dec-2019
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2020
Date of Submission	30-Jan-2020
17. Does the Institution have Management Information System ?	Yes
If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	Institution is Managing Information System (MIS) through ECAP software. The data pertaining to faculty, staff and students is made available in this system. The transparent communication is in place through this MIS. Parents can track the attendance and performance of their ward, officials can monitor the class work, organization of training programs, workshops, etc. and other activities of the college. Students counseling and guidance is possible in this system. The issue and return of the library books can also be done through this MIS. The details regarding the fee payments, dues can be read. The following are the Mainmodules incorporating in this MIS. 1. Admin 2. Admissions 3. Academics 4. Examinations 5. Employee 6. Correspondence The following are the Submodules incorporating in this MIS. 1. Admin: Academic Calendar, College Details, Diary, Holidays, News Events, Circulars, Library Books, Leaves History 2. Admissions: Admission Register, Circular, Library Books, Leaves History 3. Academics: Absentees Report, Academic Register, Attendance Report, Counseling, Current Time Table, Disciplinary Action, Faculty, Internal

Marks, Leaves, Lesson Plan, Projects, Resources, Students, Student Profile, Syllabus Coverage, Teaching Plan, Teaching Schedule, etc. 4. Examinations: Examination Schedule, External, Internal, Invigilation Charges, etc., 5. Employee: Leave Management, Payroll, Report, etc. 6. Correspondence: Complaint / Suggestions, Greetings, Inbox, Parents Address, Parent Correspondence, Staff list, Students List, etc.

#### Part B

#### **CRITERION I – CURRICULAR ASPECTS**

#### 1.1 – Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

Gudlavalleru Engineering College (GEC) was established with the primary objective of imparting a Holistic learning experience, to groom students from rural background. Over the years the Institute has also strengthened its research potential. The institute has a well-planned curriculum from its inception, the institute, through its graduates spread all over the country and globally, has contributed enormously to local, regional, national and global development. The Institute has steered itself towards outcome-based education. Accordingly, the Program Educational Objectives (PEOs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) have been thoughtfully drafted. The POs were designed to reflect the spirit of the Graduate Attributes of the National Board of Accreditation (NBA) in their true sense. Seamless and meticulously articulated learning outcomes of individual courses have been devised to ensure realistic attainment of the outcomes. A well-established procedure for developing curricula has been put in place to fully reflect and justify the defined objectives and outcomes for various engineering disciplines. The curricula developed aims to provide a multifaceted engineering education that helps in understanding the contemporary societal issues while providing sustainable engineering solutions. The needs of the industry and social relevance of engineering education have always been the cornerstone of curricula development at GEC. A major strength of the curricula is a fine blend of skill development in modern engineering tools, multidisciplinary approach and professional ethics. The Institute is providing the best flexible curriculum which is revised every three years to keep abreast with the changing needs of the industry and society, with the active involvement of all the stakeholders. Industrial training, internships and projects, apart from professional and open elective courses are introduced as and when required. Most importantly, the teaching and support staff are regularly sent for training to ensure a smooth transcend from traditional education to effective outcome-based education. Also, feedback from the students and other stakeholders is taken regularly to analyze the attainment of the outcomes. The teaching methods are devised with the intent to bring a realization that developing and using knowledge appropriately at various levels is as important as gaining knowledge. The various statutory bodies like the Governing Body and Academic Council at the Institute level and, Board of Studies, at the department level, which have eminent and accomplished people from appropriate fields, and other department committees perform both advisories as well as vigilante roles to monitor the academic progress. The college aims to become a

centre of excellence with the synchronized effort from the visionary and reformist management with strong commitment.

#### 1.1.2 - Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entreprene urship	Skill Development
Nil	Nil	01/07/2020	0	NA	NA

#### 1.2 - Academic Flexibility

#### 1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction	
Mtech	VLSI Design and Embedded Systems	01/07/2020	
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# 1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BTech	Nil	01/07/2020

#### 1.2.3 - Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course	
Number of Students	Nil	Nil	

#### 1.3 - Curriculum Enrichment

## 1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
FUNDEMENTALS OF PCB DESIGN-PHASE I and II	18/07/2019	137
APSSDC ARC 1.0 ( Applied Robotics Control Module 1)	25/07/2019	47
APSSDC ARC 2.0 ( Applied Robotics Control Module 2)	26/11/2019	32
APSSDC ARC 3.0( Applied Robotics Control Module 3)	03/02/2020	29
CCNA RS: Routing and Switching Essentials	21/09/2019	6
CCNA RS: Introduction to Networks	21/09/2019	1
Hands on Experience on Python Programming	24/05/2019	306
Course on "Amazon web services"	06/05/2019	240
Course on Artificial intelligence, Machine	06/05/2019	250

learning with python			
Course on "Problem Solving Programming In Python"	11/11/2019	193	
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#### 1.3.2 - Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BTech	Civil Engineering	351
BTech	Electrical and Electronics Engineering	176
BTech	Mechanical Engineering	210
BTech	Electronics And Communication Engineering	278
BTech	Computer Science and Engineering	256
BTech	Information Technology	28
MBA	Master of Business Administration	283
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#### 1.4 - Feedback System

#### 1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

#### Feedback Obtained

Feedback of students on teaching of the courses, feedback of the students on curriculum and CO, PO, PSOs PEOs, Exit feedback of students, feedback of parents, feedback of stakeholders are in place. Feedback of students on the teacher will be obtained twice in a semester on various parameters those influence teaching - learning process. The voice of the students on each parameter are analysed and relevant suggestions and guidance will be given to the teacher concerned. Further, the teacher is monitored on the corrective measures implemented for increasing the effectiveness of teaching and enhancing learnability of the students. In the process of effective implementation of OBE, the views of the students, experts from academia and industry will be obtained on Vision, Mission, PEOs. PSOs, POs and COs and the opinions and suggestions are analysed and considered as input in defining / redefining them. At the end of the final year, the exit feedback will be obtained from the students on academic and administrative parameters also. Their unbiased observations will be considered in modifying the policies and procedures. The feedback of Parents will also be periodically obtained and analysed for arriving at the corrective measures for betterment of learning environment of

the college.

#### **CRITERION II – TEACHING- LEARNING AND EVALUATION**

#### 2.1 - Student Enrolment and Profile

#### 2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
Mtech	VLSI Design and Embedded Systems	24	Nill	4
Mtech	Machine Design	24	Nill	8
Mtech	Power Electronics and Electric Drives	18	Nill	5
Mtech	Strucutural Engineering	24	Nill	17
BTech	Information Technology	120	Nill	120
BTech	Computer Science and Engineering	240	Nill	240
BTech	Electronics and Communication Engineering	240	Nill	240
BTech	Mechanical Engineering	180	Nill	140
BTech	Electrical and Electronics Engineering	120	Nill	87
BTech	Civil Engineering	180	Nill	107
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## 2.2 – Catering to Student Diversity

### 2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	institution	Number of teachers teaching both UG and PG courses
2019	934	128	256	27	283

#### 2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), Elearning resources etc. (current year data)

Number of Number of ICT Tools and Teachers on Roll teachers using resources enabled Classrooms E-resources technique.	es and s used
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	ICT (LMS, e- Resources)	available	Classrooms		
283	283	5	83	83	5
View File of ICT Tools and resources					
View File of E-resources and techniques used					

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

The students are mentored on academic issues with a systematic mentoring mechanism and counselling process. Peer mentoring mechanism is also functioning effectively. One faculty member is allotted to 20 students for counselling and mentoring on academic, personal issues. In-addition to the internal source of mentoring, one male and one female, external expert counsellors are on board to conduct mass counselling and personalized mentoring. Each class having a strength of 60 students will be taken care by faculty as class teacher. A senior faculty takes care of the entire class as Academic Coordinator. Students pursuing online courses like NPTEL will be mentored by a faculty expert in the respective domain. Mentor faculty guides students to solve assignments and monitor their preparation. Potential and enthusiastic students are mentored for presenting papers and posters in technical symposia, participating in youth festivals, developing models and Apps, participating in Hackathons. Junior students will be guided and mentored by senior students on co-curricular and extra-curricular aspects. Faculty advisors will motivate and guide students to organize service activities. Focus of the institution is to achieve whole some development of students.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
4803	283	1:17

#### 2.4 - Teacher Profile and Quality

#### 2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
283	283	Nill	Nill	60

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2020	Mr. K. Siva Ram	Assistant Professor	Doctor of Philosophy on thesis entitled with "Study on Swelling and Shrinkage Behavior of Unsaturated Soil" from NIT, Nagpur
2020	Mr. S. Eswar	Assistant Professor	Doctor Philosophy on thesis entitled with "Pedestrain Behaviour Modelling on level changing facilities inside intercity railway stations" from National Institute of Technology,

			Warangal
2020	Dr. A. Sreenivasulu	Professor	Member of Institute for Engineering Research and Publication (IFERP) with membership member PM23097865
2019	Dr.M.Siva Kumar	Professor	Recognized as BoS Member of JNTUK, Kakinada
2019	Dr. P. Ravindra Babu	Professor	National Executive Council Member, ISTE, New Delhi, from Andhra Pradesh
2019	Dr. T. Narasimha Suri	Assistant Professor	Received Ph.D Degree from NITW, Warangal
2019	Dr.M.Kamaraju	Professor	Sarvothama Acharaya Puraskar Award. (Indian services in association with AP Telengana Information technology association)
2019	Dr. P.Haritha	Assistant Professor	Received Certificate of appreciation for reviewing the translated files of the course "Non Conventional Energy Resources" offered by IIT Madras in Telugu language on 29th November, 2019
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# 2.5 – Evaluation Process and Reforms

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

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semester- end/ year- end examination
Mtech	1D	2nd Semester	02/11/2020	30/11/2020
Mtech	1D	1st Semester	22/02/2020	13/03/2020
BTech	1A	IV Year 2nd Semester	16/09/2020	22/09/2020

BTech	1A	IV Year 1st Semester	20/11/2020	03/12/2019			
BTech	1A	III Year 2nd Semester	24/11/2020	07/12/2020			
BTech	1A	III Year 1st Semester	25/11/2019	05/12/2019			
BTech	1A	II Year 2nd Semester	24/11/2020	30/11/2020			
BTech	1A	II Year 1st Semester	25/11/2019	03/12/2019			
BTech	1A	I Year 2nd Semester	31/10/2020	12/11/2020			
BTech	1A	I Year 1st Semester	29/01/2020	04/02/2020			
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#### 2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

Examination Reforms by the College The college keeps its examination system open for modifications and thus strengthens it from time to time, ensuring the system fool proof and address the grievances of students, if any. The institutional reforms in all the activities of the examination system are kept at par with there forms pushed by the AICTE for various engineering disciplines. The drivers for reforms in examination system of Indian engineering education taken up by the premier technical institutions have been incorporated into our examination system and they include OBE- framework for assessment process, evaluation of higher order abilities and professional skills indifferent forms like open elective courses, optional elective courses, internship experience and project works, Bloom's taxonomy for assessment design etc. The following significant reforms were effected in the Examination system. ? Increasing weightage of marks for continuous internal assessment from 30 to 40. Continuous internal assessment is carried out in the form of class tests and mid-term examinations with 10 and 30 weightage of marks respectively. ? Preparing unit wise Question Bank, by covering all possible levels of Blooms Taxonomy, in every subject for conducting semester end examinations by involving both internal and external subject experts. ? Evaluation of Semester End Examination Answer Scripts: (i) B.Tech/MBA programmes: Single evaluation under the supervision of chief examiners (one chief examiner for every 3 or 4 examiners). The chief examiner will himself/herself re-evaluates 20 of the scripts valued by each examiner to ascertain the veracity of evaluation and also to pass on the necessary instructions to the examiners from time to time. (ii) M.Tech programmes: ? Double evaluation by two different examiners. If the variation in marks between the two evaluations is more than 20 of total external marks, third evaluation is taken up. ? Introducing challenge evaluation system and showing the evaluated answer script to the student are the measures taken as a part of the transparency in the evaluation system. ? Advanced supplementary examinations are conducted at final year level (both I and II semesters) for B.Tech and MBA programmes so as to give a chance to the students to clear the backlog subjects and obtain the degrees within the stipulated period of four years. ? Reevaluation of semester end examination answer scripts shall be carried out for registered students. If the variation in marks of two evaluations is more than 15 of total marks, there shall be a third evaluation by an examiner other than the first two examiners. The best marks of two evaluations (which are nearer) shall be taken into consideration ? Students with no backlogs and CGPA not less than 7.5 may register for two

professional elective courses offered in IV B.Tech II semester in advance so as to have exclusive project work during that semester. ? Strict adherence to the Institute academic calendar and timely publication of results. ? Preparation of detailed scheme of evaluation by internal subject / course experts and it will bring Uniformity in the evaluation among the evaluators.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

The academic calendar is prepared in consultation with the members of college academiccommittee (CAC), and displayed in all the notice boards and is made available in the collegewebsite. It includes commencement of class work, schedules of internal examinations, last day ofinstruction, and schedules of semester end examinations. College follows the academiccalendar. In case of circumstances beyond the control of the college, like natural calamities, strikes, altered schedules will be intimated to the students and faculty. Head of the department conducts meeting with the faculty and allocates the subjects andinstructs them to prepare the lesson plan of each course. Under the supervision of course coordinator, preparation of teaching plan, assignment cum tutorial questions, unit wise learningmaterial is made. Syllabus coverage is monitored by head of the department every fortnight. Deviation will be compensated by planning special classes after seeking clarification from concerned faculty member. At the college level Vice Principal academics continuously monitorsthe coverage of the syllabus every fortnight.

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

https://gecgudlavalleru.ac.in/departments.php

#### 2.6.2 – Pass percentage of students

					1
Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
1D	Mtech	Embedded Systems	6	3	50.00
1D	Mtech	Machine Design	5	5	100.00
1D	Mtech	Power Electronics and Electric Drives	3	3	100.00
1D	Mtech	Structural Engineering	19	17	89.47
1A	BTech	Information Technology	101	81	80.20
1A	BTech	Computer Science and Engineering	255	225	88.24
1A	BTech	Electronics and Communic	273	233	85.35

			ation Engineering				
-	1A	BTech	Mechanical Engineering	200	151	75.50	
	1A	BTech	Civil Engineering	184	130	70.65	
	E		Electrical and Electronics Engineering	176	133	75.57	
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#### 2.7 - Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

https://www.gecgudlavalleru.ac.in/images/admin/pdf/college/student survey/St udent%20Satisfaction%20Servey%202019-20%20(1).pdf

#### CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

#### 3.1 - Resource Mobilization for Research

3.1.1 - Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year	
Any Other (Specify)	I I		17.25	17.25	
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#### 3.2 - Innovation Ecosystem

3.2.1 - Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Three Day Training Program on INTRODUCTION TO PYTHON	ME	19/08/2019
Two Day Training Workshop Hand's on Training Workshop on "Design and Development of e-Cycle"	ME	04/09/2019
Guest Lecture on "Design of Bio Digesters"	ME	21/09/2019
Guest Lecture on "Condition Monitoring of Industrial Rotating Equipment"	ME	22/01/2020
Two Day Hands on Training on "ARDUINO"	ME	24/02/2020
A National Level webinar on Intellectual Property Rights Patents -A View	ECE	10/08/2020

Training program on "Amazon web services"	CSE	07/02/2020
Learnathon on RPA	CSE	11/12/2019
Training Program on "Python Programming"	CSE	04/12/2019
Training Program on "Python Programming"	CSE	16/12/2019
Workshop on "Salesforce ADX 201"	CSE	23/09/2019
Workshop on " Data science and Big data analytics"	CSE	12/09/2019
Workshop on "Problem Solving Programming In Python"	CSE	11/09/2019
Workshop on "Fundamentals of game development using unity 3D and C#"	CSE	03/09/2019
Guest Lecture on "Corporate Excellence"	CSE	13/08/2019
Advanced Development Tools Based IoT	ECE	11/11/2019
Data Acquisition and RT using LABVIEW	CSE	25/11/2019
A Five Day FDP on Sales Force Essentials for Business Specialists	MBA	05/08/2019
A Four Day FDP on Data Science and Big Data Analytics	CSE	12/09/2019
AICTE Sponsered Two-Week FDP on Soft Computing Techniques and its Applications	IT	27/01/2020
Two Weel AICTE FDP on Data Science and Data Analytics through Python and R Programming	CSE	27/01/2020
Exploring Classroom Processes	CSE	01/08/2019
Effects of Soil Structure on Structures Against Static And Dynamic loads	CE	03/02/2020
National level awareness programme on "Build enterprise of your dream"	MBA	29/02/2020
"Hands on Training on CATIA, DELMIA and SIMULIA"	ME	27/08/2019

Guest Lecture on Design and Analysis of Experiments	ME	30/08/2019
One Week Online FDP on "Research Trends in Mechanical Engineering"	ME	15/06/2020
Guest Lecture on "Metal Forming and Industrial Expectations"	ME	27/07/2019

# 3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category			
Best Machine Design student	Aakulamannati chilakamarry Tejaswini (17481D1501)	JNTUK Prathiba Awards	06/11/2020	State Level (UG)			
Best Mechanical Engineering Student	Mr. K. Naga Venkatesh (16485A0315)	JNTUK Prathiba Awards	06/11/2019	State Level (UG)			
Best Mechanical Engineering Student	Mr. I Sumanth (15481A0352)	JNTUK Prathiba Awards	06/11/2019	State Level (UG)			
e-Portal for Textile Marketing	Meesala Ramana (16481A05C9) and Others	Smart India Hackthon 2019 Grand Finale AICTE and MHRD in Panipat Institute of Engineering and Technology	02/03/2019	Software			
Technological advances for Retail Outlets	Sneha Priya (17481A05C4) and others	Smart India Hackthon 2020- Finals Gujarat Forensic Science University nodal center, Gandhinagar, Gujarat	01/08/2020	Software			
Best Mechanical Engineering Student	Mr. K. Naga Venkatesh (16485A0315)	JNTUK Prathiba Awards	06/11/2019	State Level (UG)			
Best Machine Design student	Aakulamannati chilakamarry Tejaswini (17481D1501)	JNTUK Prathiba Awards	06/11/2020	State Level (UG)			
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# 3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation	Name	Sponsered By	Name of the	Nature of Start-	Date of

Center			Start-up	ир	Commencement			
Nil	Nil	Nil	Nil	Nil	01/07/2020			
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#### 3.3 – Research Publications and Awards

## $3.3.1-\mbox{lncentive}$ to the teachers who receive recognition/awards

State	National	International
2	4	1

#### 3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
Mechanical Engineering	2
Computer Science and Engineering	2
Master of Business Administration	1
Basic Sciences and Humanities	2

## 3.3.3 – Research Publications in the Journals notified on UGC website during the year

Туре	Department	Number of Publication	Average Impact Factor (if any)
International	Civil Engineering	13	1.70
International	Electrical and Electronics Engineering	1	0.18
International	Mechanical Engineering	15	0.75
International	Electronics and Communication Engineering	44	3.37
International	Computer Science and Engineering	6	6.36
International	Information Technology	6	3.65
International	Master of Business Administration	13	0.4
International	Basic Sciences and Humanities	8	2.2
International	English	1	0.6
	No file	uploaded.	

# 3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Basic Sciences and Humanities	4
Information Technology	5
Computer Science and Engineering	2
Electronics and Communication	2

Engineering	
Mechanical Engineering	1
Electrical and Electronics Engineering	4
No file	uploaded.

3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

	T Fubivied/ ilidia	I				
Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Optimal IMC -PID Controller Design For Large- Scale Power Systems Via EDE Al gorithm- based Model Appr oximation Method	Vasu G	Transact ions Of the Institute Of Measure ment and Control	2019	0	Gudlaval leru Engin eering College	Nill
Behavior of P-Delta Effect in High- Rise Buildings with and without Shear Wall	Mr. Phani Kumar V	Internat ional Journal of Recent Technology and Engine ering	2019	0.14	Gudlaval leru Engin eering College	Nill
Internal Curing Efficiency of Pre- Wetted Lig htweight Fine Aggregates on Strength Parameters of Concrete	Dr. K. Prafulla Devi	Internat ional Journal of Recent Technology and Engine ering	2019	0.14	Gudlaval leru Engin eering College	Nill
Strength and Durability Properties of Concrete with Partially	Mr. A.V. Phani Manoj	Internat ional Journal of Innovative Technology and Exploring Engineerin	2019	0.3	Gudlaval leru Engin eering College	Nill

Replaced Cement with egg shell Powder and Fine Aggregate with Quarry Dust		g				
Response Of Structures Against Tsunami Forces Under Different Soil Conditions	Mr. A.H.L. Swaroop	Internat ional Journal of Recent Technology and Engine ering	2019	0.14	Gudlaval leru Engin eering College	Nill
Strength and Durability Properties of Concrete with Partially Replaced Cement with egg shell Powder and Fine Aggregate with Quarry Dust	Dr. P. Kodanda Rama Rao	Internat ional Journal of Innovative Technology and Exploring Engineerin g	2019	0.3	Gudlaval leru Engin eering College	Nill
Use of Treated Domestic Wastewater in Cement and Fly Ash Mortar	Dr. G. Reddy Babu	Internat ional Journal of Recent Technology and Engine ering	2019	0.14	Gudlaval leru Engin eering College	Nill
Strength and Durability Properties on Fiber Reinforced Concrete by Replacing Fine Aggregate	Mr. A.H.L. Swaroop	Internat ional Journal of Civil Engi neering Technology	2019	2.76	Gudlaval leru Engin eering College	Nill

the change of Coastal	Mr. G.T.N. Virendra	Internat ional	2019	0.14		
Shoreline of Krishna District, Andhra Pradesh, INDIA using Remote sensing amp Geographic Informatio n Systems		Journal of Recent Technology and Engine ering		U.14	Gudlaval leru Engin eering College	1
Optimal IMC -PID Controller Design For Large- Scale Power Systems Via EDE Al gorithm- based Model Appr oximation Method	Vasu G	Transact ions Of the Institute Of Measure ment and Control	2020	0	Gudlaval leru Engin eering College	Nill

# 3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
A two phase approach for the design of two-degree -of- freedom of robust controller for higher order interval system	D.Sriniv asa Rao Mangipudi Sivakumar M.Ramaling a Raju	Internat ional Journal of Automation Control.	2020	12	Nill	Gudlaval leru Engin eering College
SAPF for	В.	Internat	2020	14	Nill	Gudlaval

Power Quality Im provement Based on PSODE Opti mization Algorithm	Mahesh Babu, N. Uday Kumar, K. Santhosh Kumar, A. Amarendra, B. Bindhu	ional Journal of Engineerin g and Advanced Technology (IJEAT)				leru Engin eering College
Design Strategies for speed control of an inverter fed permanent magnet syn chronous motor drive	Ramana Pilla Dr.K.Alice Mary Surya kalavathi Mungala	Internat ional Journal of Power and Energy Conversion	2020	8	Nill	Gudlaval leru Engin eering College
A Fuzzy Based Tran sformer less Inverter for Reactive Power Control in Grid-Tied PV System	Dr.B.Madhu Kiran Dr.G .Kishor Babu Dr.Jy othilal Nayak barothu G.Phani babu	TEST Eng ineering Management	2020	G	Nill	Gudlaval leru Engin eering College
Strength and Durability Properties of Concrete with Partially Replaced Cement with egg shell Powder and Fine Aggregate with Quarry Dust	Mr. G.T.N. Virendra Mr. A.V. Phani Manoj	Internat ional Journal of Recent Technology and Engine ering	2019	1	1	Gudlaval leru Engin eering College
Strength and Durability Properties of Concrete with	Mr. A.V. Phani Manoj Mr. G.T.N. Virendra Dr. P. Kodanda	Internat ional Journal of Innovative Technology and Exploring	2019	1	1	Gudlaval leru Engir eering College

Partially Replaced Cement with egg shell Powder and Fine Aggregate with Quarry Dust	Rama Rao	Engineerin g				
Strength and Durability Properties on FiberRe inforced Concrete by Replacing Fine Aggregate with Stone Powder	Mr. A.H.L. Swaroop	Internat ional Journal of Recent Technology and Engine ering	2019	3	Nill	Gudlaval leru Engir eering College
Influence of Tsunami Induced Scouring Action On Foundation Stability Of Coastal Structures	Mr. A.H.L. Swaroop	Internat ional Journal of Civil Engi neering Technology	2019	3	Nill	Gudlaval leru Engir eering College
Optimal IMC -PID Controller Design For Large- Scale Power Systems Via EDE Al gorithm- based Model Appr oximation Method	Vasu G Sivakumar M Ramalinga Raju M	Transact ions Of the Institute Of Measure ment and Control	2020	38	Nill	Gudlava leru Engin eering College
A Fuzzy Based Six- pulse Modulation for DABCC Converter	Dr.G.Kis hor Babu D r.Jyothila l Nayak barothu Dr.B.Madhu Kiran K.Krishna	TEST Eng ineering Management	2020	5	Nill	Gudlava: leru Engin eering College

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 $3.3.7-{\hbox{Faculty participation in Seminars/Conferences and Symposia during the year:}\\$ 

Number of Faculty	International	National	State	Local	
Attended/Semi nars/Workshops	43	221	456	139	
Presented papers	13	6	Nill	Nill	
Resource persons	4	4	Nill	Nill	
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#### 3.4 - Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Health Camp on Skin, Corona virus at Angaluru	NSS	10	92
Teaching Classes Youth Parliament awareness program For Angaluru Villagers, School Children's NSS Volunteers at Angaluru	nss	10	60
Modern Farming Methods By using drone and other technology at Angaluru	NSS	10	60
Inaugural Function Yoga Program, Inaugural Speeches, Yoga Program at Angaluru	NSS	18	100
Mahatma Gandhi Jayanthi Celebration - Conducted Photo Gallery, Essay Writing, Singing Compilations, Skits, Debating Programmes at Gudlavalleru	NSS	18	400
Ban Plastic - Rally and picking	nss	18	100

the plastic at the road side of the Gudlavalleru at Gudlavalleru			
Plantation Programme - 1000 Plants Planted at Gudlavalleru	nss	18	100
Teachers day Celebrations- Conducted Compilations among the School Children's at Gudlavalleru Ambedkarnagar School	NSS	18	100
Independence day Celebrations - Conducted Sadhbhavana Yatra, on Mahatma Gandhi Preaching's at Gudlavalleru	nss	18	100
Clean and Green Programme - At railway Station we conducted Clean and Green Programme at Gudlavalleru	NSS	18	100
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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited		
Go Karting Design and Racing Challenge	Participation Certificate	AIRC 2020, Pune	25		
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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agen cy/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
Swatch Bharath	NSS UNIT	Clean and Green Programme - At railway Station we conducted Clean and Green Programme at Gudlavalleru	18	100

Aawareness on National Day Celebrations Scheme	NSS UNIT	Independence day Celebrations - Conducted Sadhbhavana Yatra, on Mahatma Gandhi Preaching's at Gudlavalleru	18	100
Community Service Scheme	NSS UNIT	Teachers day Celebrations- Conducted Compilations among the School Children's at Gudlavalleru Ambedkarnagar School	18	100
Environment Protection Scheme	NSS UNIT	Plantation Programme - 1000 Plants Planted at Gudlavalleru	18	100
Environment Protection Scheme	NSS UNIT	Ban Plastic - Rally and picking the plastic at the road side of the Gudlavalleru at Gudlavalleru	18	100
Youth Empowerment Scheme	NSS UNIT	Mahatma Gandhi Jayanthi Celebration - Conducted Photo Gallery, Essay Writing, Singing Compilations, Skits, Debating Programmes at Gudlavalleru	18	400
Health Awareness Scheme`	NSS UNIT / Gayathri Parivar	Inaugural Function Yoga Program, Inaugural Speeches, Yoga Program at Angaluru	18	100
Kisan Yojana Swatch Bharath	NSS UNIT / Agriculture Department Gudlavalleru	Modern Farming Methods By using drone and other technology at	10	60

		Angaluru		
Community Service Scheme	NSS UNIT	Teaching Classes Youth Parliament awareness program For Angaluru Villagers, School Children's NSS Volunteers at Angaluru	10	60
Awareness Scheme for Community	NSS UNIT	Health Camp on Skin, Corona virus at Angaluru	10	92
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## 3.5 - Collaborations

3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Internship	JAHNAVI AVIRNENI	Institution	30
Internship	KARNATAKAPU VEERA RAGHAVA	Institution	30
Internship	KASARAPU SAI KRISHNA	Institution	30
Internship	KAVYANJALI BODDAPATY	Institution	30
Internship	KOLLIPARA BAJIBABU	Institution	30
Internship	KOSANAM SRI ABHINAYA	Institution	30
Internship	LOYA MEGHANA	Institution	30
Internship	POLABATHINA PREM TEJA	Institution	30
Internship	BAVIRISETTI DIMPLE NAGA VENKATA KOMALI	Institution	30
Internship	BEERAM KUMARA SAI SRINIVASA PHANI RAJ	Institution	30
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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage  Title of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
---	---------------	-------------	-------------

Internship	Summer Internship program	CSR infratech India pvt Ltd	25/11/2019	26/11/2019	2
Internship	Training on EV battery Charging Techniques	Cellerite Systems	01/05/2020	30/05/2020	156
Internship	Training	Smart Bridge Educational Services Pvt. Ltd., Hyderabad	29/04/2020	29/05/2020	34
Project	ContikiMAC for Wireless Sensor Network Monitoring Application	Centre for Artificial Intelligence and Robotics, Defence Research Development Organisation , Government of India, Ministry of Defence DRDO Complex, CV Raman Nagar, Bengaluru- 560093 Tel: 91-80-2524 1983	22/07/2019	20/05/2020	1
Project	Intelligent Traffic Control system using RFID and GSM	Guest House Complex, ECIL, Hyderabad - 500 062 Tel: 91 (40) 27125864, 27122816	21/01/2020	20/02/2020	3
Internship	Internet of Things	Smart Brid ge Education al Services Pvt. Ltd., Plot No 132, Bapuji Nagar, Habsiguda, Above DCB bank, 2nd floor, Nacharam Main Road,	20/04/2020	20/05/2020	85

		Hyderabad - 500 076					
Internship	Machine Learning Artificial Intelligence	Smart Brid ge Education al Services Pvt. Ltd., Plot No 132, Bapuji Nagar, Habsiguda, Above DCB bank, 2nd floor, Nacharam Main Road, Hyderabad - 500 076	15/04/2020	15/05/2020	165		
Internship	Advanced Technology Program	Wipro Limited, Banglore	05/02/2020	07/02/2020	1		
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3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
National Instruments, Bangalore	11/11/2019	Provides Curriculum	10
Texas Instruments /EdGate Technologies Pvt. Ltd., Bangalore	27/09/2019	Provides Texas Instruments (TI) India University Program which consists of curriculum, Lab setup, FDP, Workshops/Events, Training Programs, TI Lab Engagement Program.	40
Voltino Systems LLP, Srinivasapuram, Ramanathapura, Hyderabad-500013	06/03/2019	Development and upgradation of technology in the fields of design of power supplies, Industry Automation and PV Battery Chargers.	12
Hitech Automation, Vijayawada	01/04/2019	Development and up gradation of technology in the fields of PLC applications, instrumentation,	12

		measurements, industry automation and closed Loop Controllers				
SmartBridge Educational Services Pvt. Ltd., Hyderabad (Smart Bridge)	17/04/2020	Learnathon on RPA II III B.Tech CSE	290			
SmartBridge Educational Services Pvt. Ltd., Hyderabad (SmartBridge)	17/04/2020	Coding program on TEK HACK GEC-2019 for IV B.Tech-CSE	250			
SmartBridge Educational Services Pvt. Ltd., Hyderabad (SmartBridge)	17/04/2020	Training program on Artificial intelligence, Machine learning with python for IV B.Tech CSE	258			
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# CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

# 4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development			
191.5	93.25			

## 4.1.2 - Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added					
Campus Area	Existing					
Class rooms	Existing					
Laboratories	Existing					
Seminar Halls	Existing					
Classrooms with LCD facilities	Existing					
Seminar halls with ICT facilities	Existing					
Video Centre	Existing					
Value of the equipment purchased during the year (rs. in lakhs)	Existing					
Classrooms with Wi-Fi OR LAN	Existing					
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Existing					
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## 4.2 – Library as a Learning Resource

# 4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS	Nature of automation (fully	Version	Year of automation	
software	or patially)			

GEC Library	Fully	8.05	2002	
E-CAP	Fully	3.0	2014	

## 4.2.2 - Library Services

Library Service Type	Existing		Newly	Added	Total		
Text Books	49078	49078 19412612		147 57590		19470202	
Reference Books	8891	4633109	18	12190	8909	4645299	
e-Books	10700	568227	1000	19470	11700	587697	
Journals	672	1012067	151	221942	823	1234009	
e- Journals	2343	5837537	1110	1165072	3453	7002609	
Digital Database	25196	628327	4329	67522	29525	695849	
Library Automation	12000	340000	250	Nill	12250	340000	
Library Automation	59	14190008	Nill	Nill	59	14190008	
Weeding (hard & soft)	870	217500	18	5600	888	223100	
Others(s pecify)	105538	85372	Nill	19470	105538	104842	
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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	ne of the Teacher Name of the Module		Date of launching e- content
Sri K Venkateswara Rao	Estimation Costing and Valuation	Gudlavalleru Engineering College	01/07/2019
Ms K Susmitha, Sri T Hemanth Kumar, Sri PVM Raju	Managerial Economics and Financial Analysis	Learning Material in Central Library In Gudlavalleru Engineering College, Gudlavalleru, 192.168.0.48	01/07/2019
Dr G Reddy Babu, Sri K Visesh Kumar	Advanced Environmental Engineering	Learning Material in Central Library In Gudlavalleru Engineering College, Gudlavalleru, 192.168.0.48	01/07/2019

Sri G Sai   Carring Material   Carring Material				
Chaitanya, Ms P Vindhya Rani  its Control  in Central Library In Gudlavalleru Engineering College,	Krishna, Sri P Bala	Drawing of Irrigation	in Central Library In Gudlavalleru Engineering College, Gudlavalleru,	01/07/2019
Resistant Design in Central Library In Gudlavalleru Engineering College, Gudlavalleru, 192.168.0.48  Dr A Sreenivasulu Advanced Concrete Structures Learning Material in Central Library In Gudlavalleru Engineering College, Gudlavalleru, 192.168.0.48  Sri G TN Environmental Impact Assessment Management Learning Material in Central Library In Gudlavalleru Engineering College, Gudlavalleru, 192.168.0.48  Sri P SS Anjaneya Repair and Rehabilitation of Structures Engineering College, Gudlavalleru Engineering College,	Chaitanya, Ms P		in Central Library In Gudlavalleru Engineering College, Gudlavalleru,	01/07/2019
Structures in Central Library In Gudlavalleru Engineering College, Gudlavalleru, 192.168.0.48  Sri G TN Veerendra , Dr Subhashish Dey  Impact Assessment Subhashish Dey  Management  Impact Assessment Impact Assessment Subhashish Dey  In Gudlavalleru Engineering College, Gudlavalleru, 192.168.0.48  Dr G Reddy Babu  Industrial Waste Management  In Central Library In Gudlavalleru Engineering College,			in Central Library In Gudlavalleru Engineering College, Gudlavalleru,	01/07/2019
Veerendra , Dr Subhashish Dey Management in Central Library In Gudlavalleru Engineering College, Gudlavalleru, 192.168.0.48  Dr G Reddy Babu Industrial Waste Management in Central Library In Gudlavalleru Engineering College, Gudlavalleru Engineering College, Gudlavalleru Engineering College, Gudlavalleru, 192.168.0.48  Sri P SS Anjaneya Babu , Ms Ch S Tirumala Devi Rehabilitation of Structures In Gudlavalleru Engineering College, Gudlavalleru Engineering College, Gudlavalleru Engineering College,	Dr A Sreenivasulu		in Central Library In Gudlavalleru Engineering College, Gudlavalleru,	01/07/2019
Management in Central Library In Gudlavalleru Engineering College, Gudlavalleru, 192.168.0.48  Sri P SS Anjaneya Babu , Ms Ch S Tirumala Devi  Rehabilitation of In Gudlavalleru Engineering College, College, College,	Veerendra , Dr	Impact Assessment	in Central Library In Gudlavalleru Engineering College, Gudlavalleru,	01/07/2019
Babu , Ms Ch S Rehabilitation of in Central Library Tirumala Devi Structures In Gudlavalleru Engineering College,	Dr G Reddy Babu		in Central Library In Gudlavalleru Engineering College, Gudlavalleru,	01/07/2019
Gudlavalleru, 192.168.0.48	Babu , Ms Ch S	Rehabilitation of	in Central Library In Gudlavalleru Engineering College, Gudlavalleru,	01/07/2019
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# 4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Туре	Total Co	Computer	Internet	Browsing	Computer	Office	Departme	Available	Others

	mputers	Lab		centers	Centers		nts	Bandwidt h (MBPS/ GBPS)	
Existin g	1520	30	280	1	1	2	9	280	0
Added	43	0	80	0	0	0	0	80	0
Total	1563	30	360	1	1	2	9	360	0

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

360 MBPS/ GBPS

#### 4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
E-Content (Learning Material)	http://civil.gecgudlavalleru.ac.in/e_content
E-Content (Learning Material)	http://eee.gecgudlavalleru.ac.in/e_content
E-Content (Learning Material)	http://me.gecgudlavalleru.ac.in/e_co ntent
E-Content (Learning Material)	http://ece.gecgudlavalleru.ac.in/e_cont ent
E-Content (Learning Material)	http://cse.gecgudlavalleru.ac.in/e_cont ent
E-Content (Learning Material)	http://it.gecgudlavalleru.ac.in/e_conte_nt

#### 4.4 - Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites
86.65	78.99	628.75	425.56

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

Institution devised definitive policies, procedures and mechanisms for the establishment, utilization and maintenance of physical, academic and support facilities. Mechanisms for maintaining building hygiene, toilet hygiene, water supply, power backup, medical facilities, etc., are formulated for efficient functioning of the college. Faculty, staff and students are sensitized on the guidelinesmechanisms framed. Class Rooms: • Use of non-dust chalks. • Daily sweeping of class rooms. • Wet cloth cleaning of benches (at least twice a week). • Black board cleaning (with we cloth daily). • Provision of dustbins in each class room. Laboratories - Maintenance Utilization: • Preventive

maintenance is followed. • Additional experiments are designed to utilize all the equipment available in the lab. • Periodical checkups and calibration of equipment in all laboratories. • Depending on the experiment, one, two or a maximum of three students perform a single experiment with common set of apparatus. • Stock verification is being conducted in all laboratories every year. Computing Facilities-Maintenance Utilization • Computing facilities are provided as per the AICTE norms, even extra computers are provided to meet the practical requirements. • Internet connectivity with a total of 280 Mbps band width is provided. • All the computer systems in the college are on LAN with OFC backbone. • Computing facilities are made available to the students for at least 12 hours a day and WiFi enabled facility is provided in a radius of 0.5 km. • A team of technicians with a faculty in-charge takes care for the maintenance of computers. • Necessary Licensed software are procured. • Servers like LINUX, WINDOWS, Web Servers, Database etc., are provided. • Additional projects are taken up by the students for optimum utilization of the facilities. Water: Sufficient and suitable water for utilities and drinking are provided. RO plants are installed for the supply of pure drinking water. Procedures for proper maintenance of the plant are followed. Electricity: HT supply is provided to the college. All electrical installations used to be certified for safety. Sufficient backup power supply is provided. Ample lighting, fans, air-conditioning are provided. They should be used frugally and when required, promoting the culture of avoiding unnecessary usage and promoting the culture of energy saving and economizing the energy cost. Periodical verification and maintenance of all the electrical installation will be done as a means of employee preventive maintenance. Medical facilities: Medical centre is established. Two part-time medical doctors and Two full-time medical assistants are appointed. First aid boxes are provided in all departments and sections. Ambulance is provided. Newly joined students will be given free vaccination against Typhoid, Hepatitis-B every year. Sports facilities: College provided adequate infrastructure for sports games, Gymnasium for ladies and gents is provided separately. Both indoor and outdoor games facilities are provided. Three physical directors are appointed for training the students. Coaching camps will be conducted with external expert resource persons. Enthusiastic students are provided with encouragement, support and motivational incentives. National level tournaments are also organized in the college.

https://gecgudlavalleru.ac.in/quality\_policy.php

#### CRITERION V – STUDENT SUPPORT AND PROGRESSION

#### 5.1 - Student Support

#### 5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees	
Financial Support from institution	Poor Merit Scholarship sponsored by Alumni Association, GEC	26	26000	
Financial Support from Other Sources				
a) National	Fee Reimbursement	2882	220144000	
b)International 0		Nill	0	
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5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
Talk on Life Skills	21/08/2019	170	Er. J.V. Bharani Prasad, Chief Engineer-Marine, SHELL Malaysia
Engineering for Change	13/09/2019	170	Er. Santha Rao Panchala, Senior Quality Control Officer, PR RD Dept, Govt. of AP.
Three day Work Shop on Fundamentals of PLC- Phase I	18/07/2019	166	IE(I) /ISTE/ESCON
A Two day Adjunct Faculty Program on Advances in Power System Operation and Control	19/08/2019	181	IE(I) /ISTE/ESCON
A Two day Adjunct Faculty Program on Advances in Power System protection	07/09/2019	181	IE(I) /ISTE/ESCON
Guest lecture on Electric Vehicle Technology	25/09/2019	103	SAE INDIA
Guest leacture on "metal forming and industrial Expectations"	27/07/2019	185	Mr. B.Vinay Mohan, Joint President (o), Rashtriya Metal Industries Ltd, Valsad Dist, Gujarajt.
Guest leacture on "Mechanical Engineering and it's Significance	17/08/2019	140	Mrs. M.Kanka Durga, AEE Irrigation Department, Vijayawada and GEC Alumni.
Guest lecture on Electric Vehicle Technology	25/09/2019	95	Mr. Shanmugam, Chairman SAE India Sothern Section and Director Design Desk India Pvt Ltd
Guest Lecture on Condition Monitoring of Industrial Equipment	22/01/2020	180	Mr.Ganti Subbarao, Category IV Vibration Analyst Trainer Consultant -Rotating Equipments Vibrations Analysis

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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2019	Schivalayam Jobs	11	180	11	11
2019	GATE Training	52	30	1	Nill
2019	Placement Training	1043	Nill	592	592
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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
Nill	Nill	Nill

## 5.2 - Student Progression

5.2.1 – Details of campus placement during the year

	On campus			Off campus	
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed
VALUE LABS	567	1	INFOSYS - Hackwithinfy	567	2
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5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
2020	1	B.Tech	Civil Engineering	Heriotwatt University, U.K	M.S.
2020	1	B.Tech	Civil Engineering	Deakin Uni versity,Aust ralia	M.S.
2020	1	B.Tech	Civil Engineering	Swinburne University	M.S.
2020	1	B.Tech	Electrical and	Software Engineering	MSC(SW)

				Electronics Engineering	University Of Hetrfords hire, England	
	2020	1	B.Tech	Electrical and Electronics Engineering	JNTUK, Kakinada	M.TECH
	2020	1	B.Tech	Electrical and Electronics Engineering	JNTUK, Kakinada	M.TECH
	2020	1	B.Tech	Electrical and Electronics Engineering	Srivahini Institute Of Science& Technology , Tiruvur	M.TECH
	2020	1	B.Tech	Electrical and Electronics Engineering	Indian Institute Of Packaging	PG DIPLOMA
	2020	1	B.Tech	Electrical and Electronics Engineering	University Of Southern Queensland Australia	M.S.
	2020	1	B.Tech	Computer Science and Engineering	Southeast Missouri State University	M.S.
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# 5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying	
NET	3	
SET	4	
GATE	11	
GRE	6	
Any Other	16	
No file uploaded.		

## 5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Mono-Action	Institution	12
Songs Competition(Solo)	Institution	5
Pictionary	Institution	16
JAM	Institution	16
Cad-Mania	Institution	20
Chess Competition	Institution	9

Treasure Hunt	Institution	36		
RACE - Culturals	Institution	20		
Andhra Pradesh State Ranking Table Tennis Tournament-2019	State Level	3		
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# 5.3 - Student Participation and Activities

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

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student	
2019	Roller Scating	National	1	Nill	18481A0159	JNK CHETHAN	
2019	1500 Mts Running (Women)	National	1	Nill	16481A05D9	M SAI SIRISHA	
2019	800 Mts Running (Women)	National	1	Nill	16481A05D9	M SAI SIRISHA	
2019	4X400 Mts Relay	National	1	Nill	"16481A0 5D9 17481A05L5 17481A04D8 16481A02B1	"M SAI SIRISHA, K SARVANI R CHANDRIKA, R SANDHYA RANI"	
2019	100 Mts Running	National	1	Nill	17481A05L5	K SARVANI	
2019	Long Jump	National	1	Nill	16481A05D9	M SAI SIRISHA	
2019	1500 Mts Running (Women)	National	1	Nill	16481A05D9	M SAI SIRISHA	
2019	Volley Ball	National	1	Nill	19481D8710	M SUNIL	
2019	Table Te nnisTable Tennis	National	1	Nill	15481A02C7	P D JAGADISH	
2019	Kabaddi	National	1	Nill	17481A0530	M RATEESH	
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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

Class Monitoring Committee (CMC) of each section is in place, which is composed of class representative, lady representative, representatives from different sections. The students of the class can bring their problems, needs, views on various issues to the notice of the CMC representatives. During CMC meetings conducted with faculty and head of the department, CMC representatives discuss the issues and the issues will be suitably resolved. The remedial measures will

be implemented. Further, several students clubs like Green Club, Music Photography Club, Cultural Club, Innovation Startup Club, Coding Club, Technology Transfer, Quest, Literary Dramatic Club and Debate Club are established for enhancing the skills of students. Students are the members of Academic Council, Technolight - a Semi annual news letter, training and placement cell, committees for organizing annual day celebrations, GECFEST, Seminars, etc. to impart leadership skills among students. One of the prominent alumnus will be member of governing body.

## 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

Alumni Association of Gudlavalleru Engineering College (AAGEC) was registered on 31st July 2012 under the A.P. Societies Registration Act 35 of 2001. Alumni Association of Gudlavalleru Engineering College was started in the year 2003. Objectives of the AAGEC: ? To bring together all the old students and the faculty of the college to share their experiences with each other. ? To maintain and update the database of all the alumni of the college and to interact with them. ? To utilize the rich experiences of old students of the college for the benefit and progress of the present students. ? To provide guidance to the young engineers in their endeavor for better employment and higher studies. ? To promote the campus placements through the old students working in reputed industries in India and abroad. ? To get the valuable advices of the Alumni in the overall development of the college. ? To arrange seminars, debates, workshops on Science and Technology and also to arrange cultural and social welfare programs. ? To provide financial assistance to the needed alumni members pursuing higher studies based on merit and means. ? To arrange donations to the poor students either by way of cash or kind for their education purpose. ? To maintain libraries, reading rooms, lecture halls, training centers, etc. useful to the members of the Association. ? To arrange teaching and training classes to the students studying in the college and also to the members to upgrade technical and general skills. ? To gather and maintain database of employment information and to assist the members in securing suitable jobs. ? To maintain website, publish periodical magazines of bulletins with valuable information useful to the members and students. ? To involve the members in the overall development of the college and the society. Composition of AAGEC: Chief Patron - Principal, Patron - Vice Principal, Honorary President - Professor, Advisor - Senior Faculty. Activities of AAGEC: ? Organizing "DISA a way forward..." - a career building program for first year under graduate students annually. ? Organizing technical seminars / guest lectures department-wise. ? Offering scholarships to meritorious economically poor students every year. ? Awarding GATE top tanker of the college with cash. ? Motivation and guidance to the students of the college and communications related to placement opportunities, trends in employment are in place.

5.4.2 - No. of enrolled Alumni:

13325

5.4.3 – Alumni contribution during the year (in Rupees) :

1405000

5.4.4 - Meetings/activities organized by Alumni Association:

10

CRITERION VI - GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Functioning of the college is transparent through well defined rules and regulations for governance. The voice of (opinion) every individual find place at its appropriate platform, which paves ways to participative Management and individuals can take decisions on the matters concerned to them. These provisions of governance is leading to effective leadership. Institution has well defined mechanism to monitor effective and efficient use of available resources. The budget allotment will be done based on the budget proposals. The lab technician concerned and the Faculty In-charge concerned to the laboratory will arrive at the budget requirement of the laboratory will arrive at the budget requirement of the laboratory and will send their budget requirement to the Head of the Department. Head of the Department convenes a meeting in the department and discuss the consolidated budget proposal and finalizes the Budget Proposal of the department. The Principal will consolidate such Budget Proposals received from various departments and sections and presents it in College Management Committee, a committee that comprises of both faculty representatives and Management representatives headed by the Chairman of the College. CMC is an Advisory Body to Governing Body. The Head of the Department is delegated with a financial power of Rs. 25,000/- per semester and Principal is delegated with a financial power of Rs. 2,00,000/- per semester. The top management provides effective academic leadership to the faculty, by setting goals and involving them in participative decision-making process, not only to achieve the vision, mission and goals of the institute, but also in building the organizational culture. The Principal permits the HODs and staff members in performing freely in the academic activities and administrative programmes such as departmental activities, allotment of workload, various academic committee programmes, association and club activities. Top Management : Designing Quality Policy, Provide Budget, Infrastructure, Recruitment and Provide support to economical backward students Principal : Quality policy- Planning, deployment and monitoring, Weekly Meeting with HoD, Departmental Meeting with faculty once in Semester, Administration of teaching and learning, Monitor academic performance, Non teaching member meeting, Recruitment, Maintenance, etc. Program Coordinators : Departmental meeting Execution of course work, Social activities, Mentor to student, MOUs, Maintenance, Result Analysis and corrective actions. Decentralized: (1) Top management has given necessary authority to Principal to manage different functions with operational autonomy. (2) Principal forms different committees as per requirement. (3) Committee cocoordinators have given appropriate authority by principal to take decision. Participative: (1) Participative management. (2) Students, faculty and administration join hand in hand. (3) Internal as well as external stakeholders are involved for any modification in teaching learning and administrative process or any similar process. (4) College constitutes committees for general and academic development which includes faculty, nonteaching staff and students' participation and everyone is involved in decision making processes.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

## 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details		
Admission of Students	? Highlighting infrastructural facilities, faculty, placements and achievements of the college through advertisements, brochures and website.		

	? Increasing placements and quality of placements year after year. ? Revising the curriculum every 3 years to suit the requirements of industry. ? Improving faculty quality in-terms of qualifications and experience. ? Updating the existing equipment and introducing research oriented laboratories.
Industry Interaction / Collaboration	? MoUs are signed with local industries. ? Training is provided for faculty and technical staff in local industries. ? Guest lectures are arranged on industry related topics by the industry persons. ? Students are deputed to industry for internship. ? Faculty also deputed to the industry under faculty development program.
Human Resource Management	The Gudlavalleru Engineering College (GEC) developed a Strategy to retain the employees for relatively longer period by clearly defining their roles and responsibilities and evaluating their performance by specifying key performance indicators (KPI) to understand where the faculty members stand with their overall performance ratings annually and providing required incentives depending on their performance to contain the attrition rate. The key performance indicators are five in number and they are 1. From feedback analysis: 35 Marks 2. Results analysis: 40 Marks 3. Administrative other contributions: 10 Marks 4.  Research publications academic achievements: 5 Marks 5. Exemplary academic performance: 10 Marks
Library, ICT and Physical Infrastructure / Instrumentation	Library ? Procuring the required prescribed and reference text books as suggested by the subject experts. ? Subscribing to e-journals of reputed publishers. ? Providing access to e-books and e-learning resources through digital library. ? Providing access to e-learning resources prepared by the faculty members. ICT ? Installing computer system, LCD projector and public address system in all the seminar halls and e-class rooms. ? Providing internet connectivity to all the class rooms. ? Making the campus WiFi enabled. ? Providing internet and intranet facility with sufficient bandwidth. Infrastructure ? Providing required ergonomically designed class rooms, tutorials, seminar halls etc. ?

Providing required number of laboratories with the state-of-the-art facilities. ? Providing required computational facilities with sufficient number of computers and peripherals. ? Providing the facilities like canteen, indoor and outdoor game facilities, gym centres, medical centre, hostels and transport, etc. ? Providing the required indoor and outdoor games facilities and gym centres separately for boys and girls. ? Providing the required instrumentation facilities in all the laboratories to conduct experiments. Research and Development ? Formation of an expert committee to scrutinize and approve the research project proposals. ? Allocation of a separate budget for in-house RD. ? Encouraging faculty to register for Ph.D by giving leave and financial assistance. ? Encouraging faculty for guiding research scholars. ? Providing financial assistance to faculty for presentation of research papers, attending conferences, workshops, etc. ? Motivating the faculty and students by conducting workshops, seminars, and arranging guest lectures with experts from industrial and RD organizations. ? Encouraging the students to take up research oriented projects. ? Subscribing to standard e-journals and providing the required resources like internet, digital learning materials, PCs, software, etc. to carryout research. ? Getting four engineering departments, viz., EEE, ME, ECE CSE recognized as Research Centres by the affiliating university. Examination and Evaluation ? Preparing question banks in each subject for conducting semester end examinations by involving internal and external subject experts and updating the question bank in every two years or new regulations come into existence. ? Conducting examinations as per the academic calendar and publication of results within two weeks time. ? Award of internal marks based on continuation evaluation. ? Evaluation of semester end examination answer scripts both by internal and external subject experts under the supervision of chief valuer. ? Double valuation in the case of PG M. Tech courses. ? The ASA Cell is constituted to Teaching and Learning

	strengthening the academics as well as advancement. ? Promoting the usage of ICT. ? Arranging training on pedagogy and assessing its impact on teaching—learning. ? Arranging training on latest technologies and software tools. ? Conducting FDP programs and refresher courses. ? Arranging in-house coaching for competitive examinations and providing placement related trainings. ? Arranging industrial visits and internships to provide hands-on experience. Arranging industrial training programs for the faculty.
Curriculum Development	? Appointing industry personnel, academicians and alumni as members of Boards of Studies. ? Receiving feedback from the employers and alumni on existing curriculum and improvement and innovation required. ? Involving academicians from various reputed institutes in the design and development of curriculum. ? Collecting information on latest technologies and forecasting the future needs of the industry. ? Conducting workshops on curriculum design and development for the faculty members.

# 6.2.2 – Implementation of e-governance in areas of operations:

E-governace area	Details
Planning and Development	Process of devising e-governance for planning and development is in progress.
Administration	The day-to-day administration is carried out with the ECAP software. The sub-domains of ECAP software like Admission Register, Attendance Report, Current Time Table, Disciplinary Action, Internal Marks, Student Profile, Syllabus Coverage, Circulars, Leave Management, Payroll, Parent Correspondence, Complaints / Suggestions, etc. facilitate e-governance of administration.
Finance and Accounts	Bank accounts will be generated through ECAP software. The details like Bank transaction report, Expenditures report, Fee refund, Profit / Loss statements can be maintained through ECAP. The other features of the software Day Book, Cash withdrawals, Expenditures support e-governance of Finance and Accounts. Accounts of the college will be maintained with the aid of Tally Software.

Student Admission and Support	The ECAP software used is equipped with the sub-domains of Counseling, student profile, Academic Calendar, Assignments Report, Backlogs, Class Assignments, Exam-schedule, Fee Details, Library books, Circulars, Book Search, Feedback, Marks. These provisions of ECAP software aid egovernance of student admission and support.
Examination	The college has a separate Examination Section equipped with ICT tools necessary for examination purposes. As per the requirement of examination section, the college has provided all the necessary equipment such as a separate server, computer systems, printing machines, scanners and internet facility for smooth conduct of examinations and publication of results. Question Bank software is used to generate the question paper automatically by following the prescribed levels of Blooms Taxonomy. The examination section has a separate examination management system to cover all the pre-examination post examination activities and help in smooth examination conduction and faster and accurate result calculation and publication of results on the website. Recently digital evaluation is introduced in the semester-end examinations so that the evaluation and assessment processes become fast, easy, accurate and highly secure and customized reports can be generated with ease.

# 6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2019	K.Ch. Kishor Kumar	IMEC-2019-066 Dry Charecteristics of at 6061 alloy - Coconut Shell ash metal matrix composites using stir casting in the 2nd	Gudlavalleru Engineering College	10000

		International Mechanical Engineering Congress-2019		
2019	P. Tejomurthi	Experimental Analysis of Solar Assisted Cross Flow Liquid Desiccant Cooling System in 1st International Conference on Manufacturing, Material Science Engineering (ICMMSE - 2019)	Gudlavalleru Engineering College	5000
2019	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		Gudlavalleru Engineering College	5000
2019	Dr.A.Sreeniva sulu	AICTE- Utkrisht sansthan Vishwakarma awards 2019	AICTE office, Bangalore	4511
2019	Ms. M.Sandhya	Importance of simulation in traffic engineering	Aditya college of engineering	1300
2019	Dr.V.V.Praveen Kumar	ETABS - Software	Andhra Loyala Institute of Engineering Technology, Vijayawada.	1500
2019	sulu Education Colleg Engined Kakinad		University College of Engineering Kakinada (A), JNTUK.	2500
2019	Dr.S.R.K.Reddy	Wind Loads and Effects on Structures	CSIR-SERC	10000
2019	Dr.S.R.K.Reddy	International Conference on Science Engineering and Technology (ICSET-2K19)	IFERP-AIMS	5000

2019		One day national workshop on "GEOTECHNICS OF EXPANSIVE SOILS	SVU college of Engineering, Tirupathi	1300			
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6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

-	Teaching stair di	1				1
Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2019	Effects of Soil Structure on Structures Against Static And Dynamic loads	Effects of Soil Structure on Structures Against Static And Dynamic loads	03/02/2020	08/02/2020	250	6
2020	Civil En gineering Research—A Step Forward	NA	25/05/2020	30/05/2020	250	Nill
2019	Applied Research on Renewable Energy Sources and Microgrids	NA	18/11/2019	23/11/2019	31	Nill
2020	Applied Research in Electrical Vehicle Te chnologies	NA	15/06/2020	20/06/2020	31	Nill
2019	"Hands on Training on CATIA, DELMIA and SIMULIA"	NA	27/08/2019	31/08/2019	34	Nill
2019	Guest Lecture on Design and Analysis of Experim		30/08/2019	30/08/2019	34	5

	ents	ents				
2019	NA	Training Programme on Working of CNC Machines	02/12/2019	09/12/2019	Nill	2
2020	One Week Online FDP on "Research Trends in Mechanical Engineerin g"	NA	15/06/2020	Nill	33	Nill
2020	A Five Day Online FDP On Blockchain Technologi es	FDP On	09/06/2020	13/06/2020	523	15
2020	AICTE Sponsered Two-Week FDP on Soft Computing Techniques and its Ap plications	NA	27/01/2020	08/02/2020	49	Nill
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6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
Cyber Security	1	22/06/2020	26/06/2020	5
Emerging Trends and Challenges in Electrical Engineering	6	22/06/2020	27/06/2020	5
Selection of Cement for Durable construction	20	24/05/2020	24/05/2020	1
Advances In Geotechnical Investigations	20	23/05/2020	23/05/2020	1
Building materials and construction	45	20/06/2020	20/06/2020	1

planning					
Image processing using Matlab	25	24/04/2020	27/04/2020	3	
NAAC Awareness Programme for Faculty	45	08/05/2020	14/05/2020	6	
Hot weather concrete	45	21/05/2020	21/05/2020	1	
IPR Awareness and Patent Prosecution	15	06/05/2020	10/05/2020	5	
Effective Research work using online platform during pandemic like COVID19	30	18/05/2020	18/05/2020	1	
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#### 6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching		
Permanent	Full Time	Permanent	Full Time	
43	43	5	5	

Non-teaching

#### 6.3.5 - Welfare schemes for

Teaching
? EPF: Rs.1800/- per
month. College pays its
contribution of Rs.1800/-
month if the faculty
member pays his
contribution. ? Gratuity
kind of payment: Faculty
with five years of
continuous service in the
college, are eligible for
Gratuity kind of payment
subject to a maximum
consideration of a
monthly salary of
Rs.20,500/ 75 of the
Gratuity kind of payment
payable to the faculty
after 5 years of stay in
the college will be paid
as interest free loan
against Gratuity kind of
payment payable and the
gap between two loan
claims is 3 years. ? Insurance cover for
Health (Rs.50,000/-
nealth (RS.50,000/-

? EPF: Rs.1800/- per month. College pays its contribution of Rs.1800/month if the faculty member pays his contribution. ? Gratuity kind of payment: Faculty with five years of continuous service in the college, are eligible for Gratuity kind of payment subject to a maximum consideration of a monthly salary of Rs.20,500/-. 75 of the Gratuity kind of payment payable to the faculty after 5 years of stay in the college will be paid as interest free loan against Gratuity kind of payment payable and the gap between two loan claims is 3 years. ? Insurance cover for Health (Rs.50,000/-

? Medical Facilities: Free Medical consultancy and Hospitalization for common ailments: provided through College Medical Centre and two medical officers, one male and the other female officer are appointed and two medical assistants (one male and one female). ? Free vaccination for Hepatitis-B, Typhoid, etc. ? Providing sports suit to University blues. ? Extending on-way fair and registration fee to the participants in various symposia. ? In case of emergency, ambulance facility is provided.

Students

Mediclaim) and Personal Accidents (Rs.5,00,000/). ? Transport Facilities: Free Transport for Professors Concessional Transport for other staff. ? Medical Facilities: Free Medical consultancy and Hospitalization for common ailments: provided through College Medical Centre and two medical officers, one male and the other female officer are appointed and two medical assistants (one male and one female). ? Earned Leave (E.L) of one for 30 days actual service and 1/3 of vacation period. ? Maternity leave: 60 days for two times in career with full pay for 1st time and half pay for 2nd time. ? Medical leave of 20 half pay leaves per year subject to a maximum of 180 cumulative half pay medical leaves. ? Sabbatical leave to undertake study or research or other academic pursuits solely for the objective of increasing their proficiency and usefulness to the institution on higher education system. ? Extra Ordinary Leave on Loss of pay

Mediclaim) and Personal Accidents (Rs.5,00,000/). ? Transport Facilities: Free Transport for Professors Concessional Transport for other staff. ? Medical Facilities: Free Medical consultancy and Hospitalization for common ailments: provided through College Medical Centre and two medical officers, one male and the other female officer are appointed and two medical assistants (one male and one female). ? Earned Leave (E.L) of one for 30 days actual service and 1/3 of vacation period. ? Maternity leave: 60 days for two times in career with full pay for 1st time and half pay for 2nd time. ? Medical leave of 20 half pay leaves per year subject to a maximum of 180 cumulative half pay medical leaves. ? Sabbatical leave to undertake study or research or other academic pursuits solely for the objective of increasing their proficiency and usefulness to the institution on higher education system. ? Extra Ordinary Leave on Loss of pay

### 6.4 - Financial Management and Resource Mobilization

#### 6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

GEC Strictly believes in following all statutory requirements for all audits and accounting practices. The Institution conducts internal and external financial audits regularly. As part of this mechanism, College conducts internal financial audit by presenting outcome budget, Income and Expenditure details, Receipts and Payments, Budgetary obligations in College Management Committee for discussion and communications. The audit objections, if any will be discussed in the CMC. CMC will be conducted once in three months. College conducts external financial audits regularly and the copies of audited statement will be published in college website. The external audit is conducted once in a year. The external audit is carried out by M/s Siva Krishna Narayan Chartered Accountants (Regn.No.03883S). The queries which are raised are put

before the Principal who clarifies rectifies before finalizing the accounts. The Principal also contemplates and decides to appoint an Audit Sub-Committee that attends all the queries raised by the internal audit team and external auditors. The Objective of Internal External Audit: The primary objective of conducting Internal and External audit is to identify the discrepancies in the accounting process. The in-house team, consisting of two members, conducts the internal audit twice in a year and registered Chartered Accountants conduct the external audit once in a year. The departmental budget is followed and the optimal utilization of funds and the monitoring of the budget are done through Internal and External Audit. After locating the discrepancies in the internal audit, a report is submitted to the Vice Principal administration who then reviews the report, discusses with all the CMC members and then submits the report to Principal. The Principal directs the Accounts Officer to make the necessary corrections on internal audit. The Accounts Officer rectifies the identified discrepancies and submits the corrected audit report to the Principal through Vice Principal administration. All the financial rules that are implemented in the college take place through No-Cash transaction to the extent possible. Payment of fees is also done through online transaction. An effective Financial Management System is followed which takes utmost care to follow the best accounting practices which give no chance for financial mismanagement. External Auditors who are certified Chartered Accountants prepare the Audited financial statements including Income and Expenditure details, Audited Reports and then the same is filed in the Income Tax Department.

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

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose		
Institution (GEC)	90000	Generation of Large Scale Spatial Data Base of Amaravathi (APCRDA) Andhra Pradesh, India using RS GIS and conventional Technologies		
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#### 6.4.3 - Total corpus fund generated

42626883

#### 6.5 – Internal Quality Assurance System

## 6.5.1 - Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Inte	rnal
	Yes/No	Agency	Yes/No	Authority
Academic	Nill	Nill	Yes	Internal Senior Faculty
Administrative	Nill	Nill	Yes	Internal Senior Faculty

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

Parent - Teacher meeting for II, III IV B.Tech students on 30-10-2019.

6.5.3 – Development programmes for support staff (at least three)

? A Two Day Workshop on "High Frequency Structure Simulator" (ANSYS HFSS)

during 29 30 August 2019. Resource Person: Dr.D.Prabhakar, Associate Professor, Gudlavalleru Engineering College

# 6.5.4 – Post Accreditation initiative(s) (mention at least three)

? Granted an amount to the faculty to develop a project under internal RD. ? Sanctioned paid leave to the faculty to take the training at industry. ? Granted a fund to the students to develop the projects.

# 6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	No
d)NBA or any other quality audit	Yes

# 6.5.6 - Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019	WorkShop on Fundamentals of PLC-Phase I	28/09/2019	18/07/2019	20/07/2019	166
2019	Workshop on Advancements in Power System protection Of Power System	28/09/2019	19/08/2019	20/08/2019	181
2019	Workshop on Advancements in Power System Operation and Control	28/09/2019	07/09/2019	09/09/2019	181
2019	FDP on Theoretical and practical aspects of Transformers	28/09/2019	17/10/2019	18/10/2019	146
2019	Training programme on Introduction to PYTHON	28/09/2019	19/08/2019	21/08/2019	42
2019	Work shop on Design and Development of E-Cycle	28/09/2019	04/09/2019	05/09/2019	216
2019	Design	28/09/2019	21/09/2019	21/09/2019	126

	calculations and Installation of Bio- Digesters				
2019	Workshop on Embedded System Design Using Advanced TI tools	28/09/2019	14/10/2019	16/10/2019	35
2019	Training program on Python programming	28/09/2019	04/12/2019	06/12/2019	25
2019	Training program on Learnathon on RPA	28/09/2019	11/12/2019	12/12/2019	290

# **CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES**

# 7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Nil	31/05/2020	31/05/2020	Nill	Nill

# 7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

## Percentage of power requirement of the University met by the renewable energy sources

The College has taken initiative to harvest the solar energy for its day-to-day power utilities, the installed capacity is 390KWp, with 1200 PV modules comprising of 60 parallel strings, and output voltage rating of 304V-528V, which contributes 40 to 45 of college load in daytime.

# 7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	5242
Provision for lift	Yes	5242
Ramp/Rails	Yes	5242
Braille Software/facilities	Yes	Nill
Rest Rooms	Yes	1600
Scribes for examination	Yes	6
Special skill development for differently abled students	Yes	Nill

7.1.4 – Inclusion and	Situatedness
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Year	Number of initiatives to address locational advantages and disadva ntages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2020	1	Nill	18/03/2 020	1	Community Service Scheme	Teaching Classes Youth Par liament awareness program	60
2020	1	Nill	19/03/2 020	1	Community Service Scheme	Health Camp on Skin, Corona virus	92
2020	Nill	1	16/03/2 020	1	Health Awareness Scheme	Yoga Program, Inaugural Speeches, Yoga Program	100
2020	1	Nill	17/03/2 020	1	Kisan Yojana Swatch Bharath	Modern Farming Methods By using drone and other tec hnology	60
2020	Nill	1	20/03/2 020	1	Environ ment Prot ection Scheme	Janma Bhumi -1000 Plants Planting	100
2019	Nill	1	15/07/2 019	1	Swatch Bharath	Clean and Green Programme	100
2019	Nill	1	20/09/2 019	1	Environ ment Prot ection Scheme	Plantat ion Programme - 1000 Plants Planted	100
2019	Nill	1	01/10/2 019	1	Environ ment Prot ection Scheme	Ban Plastic -Rally and picking the	100

						plastic at the road side	
2019	Nill	1	02/10/2 019	1	Youth E mpowermen t Scheme	Mahatma Gandhi Jayanthi Celebrati on - Conducted Photo Gallery, Essay Writing, Singing C ompilatio ns , Skits, Debating Programme s	400
2019	1	Nill	05/09/2 019	1	Community Service Scheme	Conducted Compilati ons among the School Ch ildren's	100
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# 7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
Hand Book	19/08/2019	The students who are admitted freshly into the courses are handed a book containing The vision, mission, objective based learning, the blooms taxonomy, code of conduct, details of the courses, facilities, the rules and regulations which are effective from time to time, etc.

# 7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants	
Awareness and Environmental Protection Scheme	20/03/2020	20/03/2020	200	
Environment Protection Scheme	20/09/2019	20/09/2019	200	
Health Awareness Scheme	16/03/2020	16/03/2020	100	
Swatch Bharath	15/07/2019	15/07/2019	100	

Aawareness on National Day Celebrations Scheme	15/08/2019	15/08/2019	100		
Unnat bharat abhiyan and Green club	25/03/2020	25/03/2020	300		
Awareness Scheme for Community	19/03/2020	19/03/2020	92		
<u>View File</u>					

7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

? Encouraging faculty, staff and students to use cycles for their mobility within the campus. ? Usage of LED bulbs for lighting ? Water Harvesting ? Solar power generation and usage ? Banning single use plastic in the campus

#### 7.2 - Best Practices

#### 7.2.1 – Describe at least two institutional best practices

Best Practice I: 1. Title of the Practice: Holistic Education for Employable Graduates. 2. Objectives of the Practice: Holistic education also referred to as 'alternative education' focuses on preparing students to meet any challenges that they may face in life and in their academic and professional career. Engineering curriculum developers and all the stakeholders involved in the education process must realize that it is a misconception to think academic achievement and professional success alone is sufficient to lead a happy life. Modern education, has lost sight of the concept of actively cultivating the development of the whole child his emotions, his social skills, his spiritual beliefs, his participation and contribution to the country and his role in the world in general. Engineering graduates face a very complex life with anxiety and fear about their future. Many professional bodies especially engineering educators are voicing their concerns about how engineering graduates struggle to find balance and meaning in their professional and personal lives. Engineering education has to rethink and develop teaching systems in relation to for example, learning objectives, choice of teaching and learning methods, assessment and organizational culture. The students must have the 3Cs (Curiosity and Creativity, Collaboration and Compassion) for a prospective future to be built. Proponents of changes in the engineering curriculum advocate a holistic and inclusive curriculum wherein technical subjects, science and humanities and soft skills form part of the curriculum. Holistic education helps in conceptualizing philosophical and abstract inquiries of life and also questions regarding the challenges in life and how to overcome obstacles, achieve success in both professional and personal life. Hence, holistic education allows students to evolve while they are young, as a complete individual who is equipped to face complex realities no matter what their apparent similarities or singularities are. A smooth blend of technical and non-technical, social subjects and humanities can enhance the quality of life of an engineer. 3. The Context: Excellence in Engineering Education from students perspective is that students learn in the class rooms and on their own by listening, visualising, experimenting, experiencing, and going through practical training. The philosophy of education is to work with the use of Knowledge- Skill and Behavior. Four years prior to their graduation during the first week of registration an Induction program is conducted for the students to provide support for a successful transition and to create a career vision approach. Three years prior to their graduation, the students are sent as grooming professionals to experience the industrial and societal environment. Two years prior to graduation, students have an opportunity to work on experiential learning. And finally During the year of graduation, students are

trained to cultivate a sense of accomplishment as employable graduates. 4. The Practice: We at GEC strive to impart holistic education to enhance the allround aspects of graduates enabling employability. The complete focus is on "KNOWLEDGE-SKILL-BEHAVIOR" - the basic mantra of OBE. The entire process is a career vision approach starts with Induction Program and ends at employment routed though the Outcome based curriculum (Cognitive domain skill set) blended with (Internship, Industrial linkage, Certification courses, Skill development Labs, Placement Training Programs) - Psychomotor domain skill set, (student clubs, professional society chapters, participation in other co and extracurricular activities -GECFEST )- Affective domain skill set. 5. Evidence of Success • Induction Program- 3 weeks as per AICTE/UGC guidelines. • Internship- Compulsory for all third year students. • Industrial linkagesthrough 32 collaborations and 41 MoUs. • Certification Courses- NPTEL Local Chapter with rating of A. • Skill Development Labs- APSSDC Center of Excellence in CSE, ECE, EEE, ME • Placement Training Programs- Compulsory from 2nd year. • Student Clubs- Nine clubs such as Cultural, Green, Literary, Innovation and Start up , Music and Photography, Coding, Techno, Quest, Electronics Hobby. • Professional Society Chapters- ACE, CSI, IEEE, SAE, IE, ISTE, IETE. • Students Achievements- • Placement - above 70. 6. Problems Encountered and Resources Required: The foremost challenge faced is time management by students and faculty at par. Further challenge lies in introspecting the ability of students. There was lack of motivation in students' due to no direct credit and stretching of college hours to accommodate the activities at initial phase of implementation but motivation enhanced considerably viewing the achievements of holistically developed students in form of higher pay packages, admission in foreign universities etc. Students have exhibited certain traits like being responsible citizen, time management, effective communication skill (technical non technical), leadership skill and lifelong learning. The deployment requires further strengthening and support from stakeholders. Best Practice II: 1. Title of the Practice: Go Green Campus 2. Goal: Environmental issues bring about thoughtful questions on the roles of Institutes in society. Irrespective of whether they are contributing to a better environment or worsening it, Institutions have to acknowledge environmental or green issues through impact research and measurement. Based on the approach GEC has significant Green Initiatives to • Promote sustainability by creating awareness • Share knowledge expertise-Expert talks about environmental problems and possible solutions Deploy eco-friendly technologies for greening and cleaning our campuses 3. The context: The main contexts are (i) Water Management, (ii) Waste management, (iii) Energy ( conservation and generation) and (iv) Landscaping and Trees. (v) Beyond the Campus Environmental promotional activities. (vi) Green, Environment and Energy Audits. 4. The Practice: Energy conservation • The Internal stakeholders takes all measures to save the power. • More than 60 lighting requirements are met through LED sources Use of renewable energy: Interactive solar power generating system of 320 KVA is provided on the roof top of the academic buildings. With the installation of this system 70 to 75 of the total electricity requirement is met. It also has additional advantages like: a) no escalation in power cost for 15 years b) upto 20 rebate in property tax under Green Building Norms , c) uninterrupted energy use during day time round the year. Water harvesting: Water recycling or waste water treatment plant of XXXm3 or XXXX liters capacity has been constructed. The principle of the treatment is based on Phytorid (Sample) technology. The Phytorid Technology treatment is absorb surface flow type in which waste water is applied to cell/system filled with porous media such as crushed bricks, grave land stones. It consists of three zones (i) Inlet zone composed of crushed bricks and different sizes of stones (ii) Treatment zone consist of same media as in inlet zone with plant species and (iii) Outlet zone. Daily XXXm3 or XXX liters recycled water is available. This is being used for landscaping of the institute. Institute also proposes to further use this recycled water for flush systems. This would save

30 of fresh water. Rain water harvesting structures are in place which collects the roof top rain waters and discharges it to ground. Efforts for Carbon Neutrality: By conserving and reusing energy the need fore xcessive use of fossil fuel scan greatly reduce, thus reducing carbon emissions. Installing solar panel shelps in reducing carbon emissions. The installation of XXXKW solar power systems has saved the amount of carbondioxide released into the air. Thus the emission of carbondioxide is well controlled with these efforts in the institute to achieve carbon neutrality. Plantation: Every year students along with the garden staff plant trees. Plantation Drives are organized by NSS. Due to this program over the years the campus has become lush and green. e-Wastemanagement: E-waste generated is first reused in the campus itself and replaced with buy back policy.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

https://gecgudlavalleru.ac.in/Best Practices.php

#### 7.3 - Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

1. Outcome Based Curriculum - Curriculum with mandatory courses for knowledge, skill and behavioral domain. Compulsory Internship, NSS, Mini Project and Project. 2. Learn with Fun- Clubs, Professional Societies, Center of Excellence Labs, Extra Curricular Activities. 3. Perfect Practice: (i) Established procedures, (ii) Transparency, (iii) Participating Management 4. Foresightedness - (i) Sponsoring Faculty to higher education with pay, (ii) Establishing CDCS Prior to the initiative of University etc. 5. Earmarking and maintaining funds for future demands. 6. Rich Learning experience to students for overall development (all round). 7. Motivation and support for academic advancement and retention. 8. Well planned Budget allocation and sanction. 9. Effective grant of autonomy through decentralization. 10. Specific initiatives for Faculty empowerment. 11. Alumni on the Board of Governing Body. 1. Excellence: NBA Accreditation more than 50 UG Program, UGC Autonomous status extended up to 2024-25 2. Adaptive: During Covid Pandemic Transition of Academic and Administrative activities from offline to online mode through Microsoft Teams, Google platform, Zoom. 1. Empowering Communities- NSS activities. 1. Respecting Nature- Go Green Campus. Formulating Policies and procedures for every aspect of functioning of the college and governance of the institution inline with the laid down quidelines is the philosophy of GEC. Creating awareness among Faculty, students and all the stakeholders about the governing mechanisms and keeping all the data accessible for the stakeholders is the indicator of transparency in functioning the college. The administrative manual in the name of Quality Document, comprises of all the minute details on the governance of the college is the distinctive feature of this institution. Every Teaching and non-teaching staff member is having the possibility to give his/her voice on the matters concerned in the appropriate platform. College Management Committee having the member representatives from Faculty and Management thoroughly discussed all the academic, administrative including financial aspects and resolves the issues keeping in view of the opinions of all the members. College earmarked 6 of income as reserve fund in the beginning and later made it as 2 as contingency fund to meet the demands and necessities of the institution. The accumulated fund was effectively utilized with due recommendations of College Management Committee (CMC). This feature contributed for the development of the institution. As a part of Manpower Planning college sponsored faculty for higher education right from its inception with pay and secure benefits. College implemented Motivational initiatives to retain faculty and advancing them academically. These initiatives reflected in the form of

having more senior faculty working for a longer period in this institution. The motive of the institution is the overall development of the student. Along with academics, Sports, Cocurricular, extracurricular and social consciousness are given priority in imparting education. Gudlavalleru Engineering College Festival (GECFEST) will be conducted annually. It is a confluence of technical, sports and cultural events. Students of other engineering colleges are invited to participate in this festival. Decorated artists of national fame are invited to exhibit their proficiency. It would be a rich learning experience to the students which they cherish throughout their life.

#### Provide the weblink of the institution

https://gecgudlavalleru.ac.in/Institutional Distinctiveness.php

#### 8. Future Plans of Actions for Next Academic Year

? To prepare and be ready with the requirements to secure NAAC- A by developing curriculum that suits Industrial demands, Implementation of modern pedagogical techniques, Research for solving complex societal problems and by adopting value based best practices. ? To reach all the goals of Academics Strengthening and Advancement cell, viz. o designing curriculum for students academic and wholesome development, including their industry readiness, o making teachers knowledgeable enough to train the students for academic, competitive, and placement examinations, following the Blooms Taxonomy. o making students solve complex engineering problems related to society, and carryout innovative projects using modern tools. o developing comprehensive learning materials for different levels of students on all important core and elective courses in all the disciplines, and o promoting research and consultancy by establishing new laboratories/ experimental setups. ? To make the institution energy conservative and also generate energy from renewable sources to enhance green echo system ? To establish more Centers of Excellence and Industry Certification facility on latest technologies in demand ? To have MoUs with industry to achieve research based solutions ? To collaborate with reputed global universities and industries. ? To make the institution as a source of technology transfer and training to surrounding villages.