# SELF STUDY REPORT

## FOR

## 1st CYCLE OF ACCREDITATION

## CHEBROLU ENGINEERING COLLEGE

NEAR POWER STATION CHEBROLU
522212
chebroluec.org

**SSR SUBMITTED DATE: 14-12-2018**

Submitted To

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

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# 1. EXECUTIVE SUMMARY

## 1.1 INTRODUCTION

Chebrolu is a village in Guntur district of the Indian state of Andhra Pradesh(AP). It is the mandal headquarters of Chebrolu mandal in Tenali revenue division. To promote and ensure rural people of India better technical education Chebrolu Engineering College (CHEC) is founded in the year 2008 with an intake of 240 in 4 branches of engineering namely CSE, ECE, EEE, IT by the group of experts, the renowned educationalists with a vision of promoting qualitative technical education under the name of Sri Visweswaraiah Educational Society. Today the college grown with the intake of 654 students all together comprising B.Tech, M.Tech besides launching new branches Civil and Mechanical. Over the period of 10 years span, the college has procured many achievements to its credit which include, 'A' grade from the Government of AP.

CHEC graduates are placed in a diverse range of organizations. Many students have gone for their higher studies both within India and abroad. The Institution has been associated with industries and organizations and has paved the way for institutional-industry of academics. It has MOUs with reputed organizations to bridge the gap between academia and Industry. The student's inclination towards R&D activity is the asset of this institution. Our students have been performing commendably well in State and National level sports and games competitions.

CHEC provide students with an excellent conducive environment for learning that prepares them to excel in their profession, guided by dynamic intellectual community and be able to face the technically complex world with creative leadership qualities. State of art knowledge through innovative research that ensures entrepreneurship and economic development for the benefit of wide spread community. With the fast paced ever growing markets having global outlook, the college explores to make global standards of engineering education. CHEC college students have bright opportunities in upcoming capital of AP which is in the vicinity.

CHEC has taken decisive steps in Engineering Education and has emerged as one of the best Institution Institutions in the Andhra Pradesh State.

**Vision**

To impart quality engineering education and offering research opportunities to students with high standards, to serve as a valuable resource for the advancement of society and organizations and impart students with ethical values to become great resource of pride for national and global needs.

**Mission**

- To implement state of teaching –learning process to our students to become resource for addressing industry and societal needs
- Continuous development of infrastructure and to provide latest equipments to our students with practical environment of learning, research, creativity and innovation to become global professionals with ethical and moral values.
- To collaborative projects with industry not only to address local rural needs but also to imbibe

knowledge to solve national and global needs

# 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

**Institutional Strength**

- It is enriched with the blend of veteran excellency and perseverance
- Students and faculty avail their intellectual and research activities from the creative resources and regional universities.
- Management displays dynamic leadership for the support of expansion and evolution.
- We use ICT for improving processes of operations in the institution.
- We maintain well flourished infrastructure and every time we planned properly for the growth of the dimension.
- The systematic Conducive teaching-learning process is followed with the strong support of library and well equipped laboratory. It moves beyond the classrooms and teachers initiate themselves available to the students at every moment.
- Voluntarily students have been formed into clubs for the overall development of the student career with the advisory role of faculty.
- The committee of the Internal Quality Assurance Cell (IQAC) of the college takes the pivotal role in ensuring quality in education through various quality sustenance and enhancement measures and monitoring mechanisms.
- Many initiatives have been aimed at community welfare.
- National Service Scheme unit (NSS) helps effectively to address the issue of Institutional Social Responsibility (ISR).
- The Institution goes on updating and modernizing lab equipment and other tools.
- Our Library becomes a strong resource for gaining knowledge through central library with digital library section.
- Our PG Programs support to stimulate the research activities.

**Institutional Weakness**

- A number of students are from socio economically backward communities and rural background.
- Students from the rural background are not enough competence in point of communication skills.
- Poor higher end research and patent filing.
- The number of students qualifying in TOFEL, GRE, GATE and Civil services is not up to the mark.
- Number of students going for research oriented higher studies is to be improved
- Locational Disadvantage

**Institutional Opportunity**

- The institution drives the faculty for the optimum utilization of the sources for the prospective career of the students.
- The management maintains good rapport and credibility with the external agencies for altogether growth of students, faculty, management and agencies.
- Our aim for national and international collaborations with the other universities is to seek the

tremendous opportunities for our students.

- Collaboration with industry is to rise the special insight on professional skills and entrepreneurial culture among the students.
- The Academic collaboration with other professional institutions and universities to introduce the professional courses as well as add on certificate courses.
- The college has the unique opportunity of contributing effectively to the development of region through research, development and extension activities.
- Our Intention is to make the students exploring their potentialities and promoting the quality of entrepreneurship.
- Encouraging the faculty to enhance their qualification for Ph.D program from the esteemed universities.
- With the technical projects inter disciplinary research centers established with the funding support from the external agencies.
- All the core departments approach the industrial consultancy services to grab the opportunities.

## Institutional Challenge

- To motivate the students to have the deeper sense of critical and analytical thinking with an endeavoring passion with moral and social consciousness.
- To strengthen the alumni forum by which their contact will be maintained for their valuable feedback.
- To retain the faculty with higher qualifications in this social milieu.
- Fluctuations in the job market.
- To become one of the leading technical institutions in the entire state.

# 1.3 CRITERIA WISE SUMMARY

## Curricular Aspects

Our academic programs have their curriculum design according to the norms of the university on all aspects like fundamental problem solving, advanced equipment usage and application of course knowledge to address the needs of the society. In this processes all the guidelines of Jawaharlal Nehru Technological University Kakinada are followed for syllabi framing, teaching-learning process, imparting of knowledge and student assessment and evaluation. The program of JNTUK actively involves industry research organization and civil society in the design and development of the curriculum. The curriculum design focuses on three key aspects-Employability, Research and Innovation and Extension of studies.

## Teaching-learning and Evaluation

It is the policy of the institution for the benefit of the student community with meticulous planning, teaching-learning schedule and evaluation process. It is witnessed by increasing ratio of admissions in Chebrolu Engineering College (CHEC) year after the year. Admissions take place on the norms of the university and the state Government. The institution highly committed to recruit highly qualified and experienced faculty as per AICTE and UGC norms. At the beginning of the semester the management monitor all the arrangements like preparing the elaborate notes for the concept by the teachers, the teaching schedule program, the program for improving the communication skills for the benefit student, innovative procedures in teaching and learning system and counseling for students by faculty for the outreach results. Teaching schedule is well furnished with

tutorial classes , special classes for students with backlogs and remedial classes for slow learners with all extra curriculum activities. We try to match the university curriculum with industrial and societal requirements.

We support the students to have the outreach knowledge by the guest lectures, workshops and conferences. Bridge course is the hall mark for the freshers and lateral entry students to cope the students up to the main stream.

## Research, Innovations and Extension

The institution gives the utmost importance to promote research activities for both faculty and students. The management facilitate the faculty and students for attending seminars, workshops, conferences and other related research activities with necessary support and interaction. Our moto of research policy :

- Regular interaction with faculty with a cross section of researchers.
- Encouraging the faculty to attend workshops conferences, general publications and pursuing research by extending the financial support.
- Collaboration with national and international institutions, industries and journal publications.
- The management goes on encouraging the student research projects by extending their financial support for procuring software and hardware components required for research projects.
- The institution has a special attention on the emerging/thrust areas of research by conducting conferences / workshops by giving the accommodation for the outside researchers to visit the college .
- The institution has been invariably involved in various social activities for the empowerment of the less privileged sections of the society and the women through NSS unit and other agencies.
- The institution has claimed appreciable recognition by the university, the state Government as well as the regional folks.

## Infrastructure and Learning Resources

The institution maintains adequate infrastructure and facilities for teaching, learning and evaluation process. These facilities are being utilized optimally and they are augmented from time to time. The college campus is grounded over 10.16 acres of area with a total building area of 18544 sqmts. The management cares for allocation for Infrastructure, Laboratory Equipment and other supporting facilities at the beginning of the every academic year. The management gives endless support with advanced research laboratory facilities to enhance their research multiple talented task skills among the students fraternity.

The management gives the decentralized autonomy to the Dept HODs to procure and enhance the infrastructure and better teaching-learning environment in every department. The management takes the special care for making the accommodation and the other arrangements for the residential requirements of boys and girls so that separate hostels for men and women are provided with all the facilities like yoga training, in-door games, news papers in both the media, magazines, RO Drinking water and CCTV cameras etc.

The college has setup the health center in the campus to render services to the faculty and students with the help of medical officer besides an ambulance service at emergency. The managment equally gives the priority to the sports and cultural events for the student's interest and health. Upgraded IT infrastructure ICT enabled classrooms, NPTEL videos, state-of the-art central and digital library are our unique objects to explore the opportunities.

The plantation, gardening activities are closely monitored by our estate officer. Every club has been under the monitoring of the individuals at hierarchy.

## Student Support and Progression

The institution has a unique system for encouraging and monitoring students' activities. Students career development is ensured by various programs like special coaching classes, career counseling, soft skills training and Camputs Recruitment Training (CRT) program. Besides the class work the below mentioned programs are existed for academic monitoring.

- Enrollment of student chapters of professional bodies and societies.
- Involvement of the students in co curriculum and extra curriculum activities on their own interest.
- Arrangement of remedial classes.
- Arrangement of special lectures/workshops/conferences/webinars.

The college management has a keen insight towards the weaknesses of the academic mileu and goes on extending their support in all dimensions like providing scholarships to financially poor students, for the student participation in sports and extracurricular activities by providing cash incentives, for the arrangement of coaching programs and facilities in both the sports and academic areas by giving the exemption of attendance for participation. A separate training and placement cell under a TPO overseas inviting the companies to the campus and the students training part in all aspects.

The college has alumni association once in every year. Student grievance cell is properly monitored by the hierarchy to redress the grievances. Women protection cell under the senior women faculty is ensured to root out the sexual harassment issues. We immensely reveal that ours is a ragging free campus. The management goes on collecting monitoring the feedback from the students for the improvement of the services. The college NSS unit is an asset to aware the students towards the societal needs and responsibilities. The college coordinates with all the stakeholders to ensure the overall development of the students.

The vertical progression of students to next academic year is strictly followed by the University Norms.

## Governance, Leadership and Management

As the management is the part of teaching community, they reflect the effective leadership which encourages participative decision making process and help in building the organizational structure. Such leadership and guidance through the apex body and the college governing council have ensured an effective system for improvement. The management promotes the culture of decentralized autonomy in the departments for catering the administrative responsibilities with accountability. By the way it is the hallmark of the institution to have the setup of decentralization and transparency. From the inception of the college, we strive hard for the pursuit of excellence and quality. The management has the perspectives on the following parameters:

· Teaching and learning

· Provision of the best resources

· Community and engagement

·       Human resource planning and development

·       Research and development

·       Industry interaction

·       Enrichment of the programs.

The management assures that all grievances/complaints are perfectly attempted. The feedback on the institutional performances is used to improve for the better services. The management never fails to allocate the budget for academic and administrative segments. It is ensured by the conduction of the academic audit with internal and external on annual basis. IQAC cell is monitoring the quality assurance strategies by conducting regular audits and quality checks. The institution service rules and policies are published and communicated to all the employees.

## Institutional Values and Best Practices

The college management has a bird's eye view on the sustenance of human values and try to make the students aware of the values and for building such a virtues it organizes so many programs like women empowerment, Engineers day, National voters day, Ammaku Vandanam and women protection cell to shun the gender discrimination.

Keeping the Security and safety of the students in mind on the top priority the nearby police patrolling serves at the regular intervals. Counseling sessions effectively worked out for grooming the students personality towards a professional life. The recreation room provides the special ambience for their peacefulness with utmost care and attention.

The college management is specially privileged to have been with all comforts like the campus on the green fields, beside the sub canal of the Krishna river, near the power substation, close to walk of the residences and nearby the police station of the region and for the endless support of mandal revenue authorities.

The management has the special attention to the preservation and utilization of the natural resources that is witnessed by the solar plant built over the roof of the campus. For the low conservation of the power we use LED lights across the campus.

For the effective utilization of the water resource rain water is properly harvested. The waste water is well managed for the lush green plantation which enrich the academic ambience.

A number of programs are arranged to make the students motivated, guided on human, social professional ethics and adapted universal values like tree plantation, blood donation and health hygiene camps. Conducive best practices like provision of credentials and cash award to academic toppers, periodical educational tour and industrial visit and financial aid to the poor students are backbone of the college.

**The best practice of the institute include** (i) Making the education to be a Source of livelihood through the institution for the down-trodden students and (ii) Encouraging Students to Participate in Fabrication based Real Time Engineering Projects through In-house Funding (III) Outcome based education implementation.

# 2. PROFILE

## 2.1 BASIC INFORMATION

| Name and Address of the College | |
|---|---|
| Name | CHEBROLU ENGINEERING COLLEGE |
| Address | NEAR POWER STATION CHEBROLU |
| City | Guntur |
| State | Andhra Pradesh |
| Pin | 522212 |
| Website | chebroluec.org |

| Contacts for Communication | | | | | |
|---|---|---|---|---|---|
| Designation | Name | Telephone with STD Code | Mobile | Fax | Email |
| Principal | R V KRISHN AIAH | 08644-253151 | 9951222268 | 0863-2237599 | r.v.krishnaiah@gmail.com |
| Associate Professor | k venkata ramaiah | 08644-254222 | 9676967532 | 0863-2358674 | kavuri555@gmail.com |

| Status of the Institution | |
|---|---|
| Institution Status | Private |

| Type of Institution | |
|---|---|
| By Gender | Co-education |
| By Shift | Regular |

| Recognized Minority institution | |
|---|---|
| If it is a recognized minroity institution | No |

| Establishment Details | |
|---|---|
| Date of establishment of the college | 30-06-2008 |

| University to which the college is affiliated/ or which governs the college (if it is a constituent college) | | |
|---|---|---|
| **State** | **University name** | **Document** |
| Andhra Pradesh | Jawaharlal Nehru Technological University,Kakinada | View Document |

| Details of UGC recognition | | |
|---|---|---|
| **Under Section** | **Date** | **View Document** |
| 2f of UGC | | |
| 12B of UGC | | |

| Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC) | | | | |
|---|---|---|---|---|
| **Statutory Regulatory Authority** | **Recognition/Approval details Institution/Department programme** | **Day,Month and year(dd-mm-yyyy)** | **Validity in months** | **Remarks** |
| AICTE | View Document | 04-04-2018 | 12 | |

| Details of autonomy | |
|---|---|
| Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges? | No |

| Recognitions | |
|---|---|
| Is the College recognized by UGC as a College with Potential for Excellence(CPE)? | No |
| Is the College recognized for its performance by any other governmental agency? | No |

| Location and Area of Campus | | | | |
|---|---|---|---|---|
| **Campus Type** | **Address** | **Location\*** | **Campus Area in Acres** | **Built up Area in sq.mts.** |
| Main campus area | NEAR POWER STATION CHEBROLU | Urban | 2.51 | 10860 |

## 2.2 ACADEMIC INFORMATION

| Details of Programmes Offered by the College (Give Data for Current Academic year) | | | | | | |
|---|---|---|---|---|---|---|
| **Programme Level** | **Name of Programme/Course** | **Duration in Months** | **Entry Qualification** | **Medium of Instruction** | **Sanctioned Strength** | **No.of Students Admitted** |
| UG | BTech,Computer Science And Engineering | 48 | Intermediate | English | 120 | 117 |
| UG | BTech,Electronics And Communication Engineering | 48 | Intermediate | English | 120 | 116 |
| UG | BTech,Electrical And Electronics Engineering | 48 | Intermediate | English | 60 | 9 |
| UG | BTech,Mechanical Engineering | 48 | Intermediate | English | 120 | 24 |
| UG | BTech,Civil Engineering | 48 | Intermediate | English | 120 | 24 |
| PG | Mtech,Computer Science And Engineering | 24 | B.Tech | English | 18 | 16 |
| PG | Mtech,Electronics And Communication Engineering | 24 | B.Tech | English | 36 | 35 |
| | | | | | | |

| PG | Mtech,Electrical And Electronics Engineering | 24 | B.Tech | English | 18 | 18 |
|---|---|---|---|---|---|---|
| PG | Mtech,Mechanical Engineering | 24 | B.Tech | English | 18 | 18 |
| PG | Mtech,Civil Engineering | 24 | B.Tech | English | 24 | 24 |

## Position Details of Faculty & Staff in the College

| | Teaching Faculty | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Professor | | | | Associate Professor | | | | Assistant Professor | | | |
| | Male | Female | Others | Total | Male | Female | Others | Total | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | | | 0 | | | | 0 | | | | 0 |
| Recruited | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Yet to Recruit | | | | 0 | | | | 0 | | | | 0 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 29 | | | | 15 | | | | 86 |
| Recruited | 28 | 1 | 0 | 29 | 12 | 3 | 0 | 15 | 41 | 45 | 0 | 86 |
| Yet to Recruit | | | | 0 | | | | 0 | | | | 0 |

| Non-Teaching Staff | | | | |
|---|---|---|---|---|
| | **Male** | **Female** | **Others** | **Total** |
| Sanctioned by the UGC /University State Government | | | | 0 |
| Recruited | 0 | 0 | 0 | 0 |
| Yet to Recruit | | | | 0 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 35 |
| Recruited | 20 | 15 | 0 | 35 |
| Yet to Recruit | | | | 0 |

| Technical Staff | | | | |
|---|---|---|---|---|
| | **Male** | **Female** | **Others** | **Total** |
| Sanctioned by the UGC /University State Government | | | | 0 |
| Recruited | 0 | 0 | 0 | 0 |
| Yet to Recruit | | | | 0 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 20 |
| Recruited | 15 | 5 | 0 | 20 |
| Yet to Recruit | | | | 0 |

**Qualification Details of the Teaching Staff**

| Permanent Teachers | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | Total |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 28 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 31 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 10 | 3 | 0 | 41 | 45 | 0 | 99 |

| Temporary Teachers | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | Total |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Part Time Teachers | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | Total |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 |

| Details of Visting/Guest Faculties | | | | |
|---|---|---|---|---|
| **Number of Visiting/Guest Faculty engaged with the college?** | **Male** | **Female** | **Others** | **Total** |
| | 4 | 0 | 0 | 4 |

## Provide the Following Details of Students Enrolled in the College During the Current Academic Year

| Programme | | From the State Where College is Located | From Other States of India | NRI Students | Foreign Students | Total |
|---|---|---|---|---|---|---|
| UG | Male | 153 | 0 | 0 | 0 | 153 |
| | Female | 137 | 0 | 0 | 0 | 137 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| PG | Male | 69 | 1 | 0 | 0 | 70 |
| | Female | 41 | 0 | 0 | 0 | 41 |
| | Others | 0 | 0 | 0 | 0 | 0 |

**Provide the Following Details of Students admitted to the College During the last four Academic Years**

| Programme | | Year 1 | Year 2 | Year 3 | Year 4 |
|---|---|---|---|---|---|
| SC | Male | 8 | 8 | 12 | 22 |
| | Female | 2 | 9 | 4 | 8 |
| | Others | 0 | 0 | 0 | 0 |
| ST | Male | 1 | 1 | 2 | 0 |
| | Female | 0 | 0 | 0 | 0 |
| | Others | 0 | 0 | 0 | 0 |
| OBC | Male | 38 | 36 | 47 | 25 |
| | Female | 25 | 23 | 22 | 13 |
| | Others | 0 | 0 | 0 | 0 |
| General | Male | 68 | 106 | 141 | 80 |
| | Female | 69 | 75 | 115 | 59 |
| | Others | 0 | 0 | 0 | 0 |
| Others | Male | 4 | 10 | 7 | 5 |
| | Female | 6 | 3 | 8 | 2 |
| | Others | 0 | 0 | 0 | 0 |
| Total | | 221 | 271 | 358 | 214 |

# 3. Extended Profile

## 3.1 Program

**Number of courses offered by the institution across all programs during the last five years**

**Response: 10**

| File Description | Document |
|---|---|
| Institutional Data in Prescribed Format | View Document |

**Number of programs offered year-wise for last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 10 | 10 | 10 | 10 | 9 |

## 3.2 Students

**Number of students year-wise during the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 1152 | 1139 | 1080 | 951 | 941 |

| File Description | Document |
|---|---|
| Institutional Data in Prescribed Format | View Document |

**Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 230 | 230 | 230 | 230 | 172 |

| File Description | Document |
|---|---|
| Institutional data in prescribed format | View Document |

**Number of outgoing / final year students year-wise during the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 207 | 186 | 181 | 194 | 265 |

| File Description | Document |
|---|---|
| Institutional Data in Prescribed Format | View Document |

## 3.3 Teachers

**Number of full time teachers year-wise during the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 163 | 155 | 147 | 128 | 105 |

| File Description | Document |
|---|---|
| Institutional Data in Prescribed Format | View Document |

**Number of sanctioned posts year-wise during the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 163 | 155 | 147 | 127 | 105 |

| File Description | Document |
|---|---|
| Institutional data in prescribed format | View Document |

## 3.4 Institution

**Total number of classrooms and seminar halls**

**Response: 41**

**Total Expenditure excluding salary year-wise during the last five years ( INR in Lakhs)**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 133 | 140 | 218 | 183 | 124 |

**Number of computers**

**Response: 450**

# 4. Quality Indicator Framework(QIF)

## Criterion 1 - Curricular Aspects

### 1.1 Curricular Planning and Implementation

**1.1.1 The institution ensures effective curriculum delivery through a well planned and documented process**

**Response:**

The Chebrolu Engineering College (CHEC) is affiliated to JNTU Kakinada follows the prescribed university curriculum and syllabi for B.Tech programmes. The University formulates an academic calendar to be followed by all the affiliated colleges. The academic planning includes the schedule of conduction of theory and practical classes, mid semester internal assessment, end semester examinations, display of internal assessment marks followed by vacation. Besides the above curriculum and syllabi the management has adopted many programs and strategies to strengthen the teaching-learning process and for the smooth conduction of the effective academic administration in the following ways:

- Procurement of university academic planning, calendar alignment, schedule preparation, incorporating the listed programs that are planned to run in the semester wise in the course of academic year like bridge course, personality development programs, communication and soft skills program etc., and are monitored by the head of the institution through the department heads.
- Formation of objective and out comes oriented teaching plan at the beginning of the semester for every subject for university Curriculum impelemntation.
- Engagement of the faculty in preparing the course materials.
- Library facilities are monitored and updated to the requirement of latest trends and subjects.
- It is mandatory to every faculty to maintain the course files which contains lesson plan,teaching diary, objectives, notes, course materials, previous question papers(internal and external), time tables, time- to-time student performance details etc.
- The management encourages the faculty to use relevant and required methods, strategies and techniques in the teaching-learning process to involve the students by learner-centric techniques like web related assignments, group discussions, use of NPTEL lectures, case studies, project survey, quiz etc in the delivery of the academic course.
- Every faculty is assigned the task of mentoring the students on academic and personal issues and therefore the teacher-student interaction will be strengthened that will help for better learning atmosphere with better performance.
- It is well planned to conduct the guest lecturers in every core area in every semester by the industry personal and stalwarts in the area for the effective implementation of the curriculum.
- Time table is framed with provision of Value Added Programmes (VAP), seminars and library hours.
- There is the regular monitoring by the heads of the department and the management for the coverage of the syllabus by the faculty and students' attendance.
- The effective evaluation process is followed formal and informal feedback system and implement the necessary actions like remdial classes etc.,.
- As the management is the part of teaching community they personally monitor the systematic examination process from setting the standard question papers to the dispatch of the reports to parents.

- Meeting of the management with the students at the weekends.
- All the adapted curriculum programs: Guest lectures, Industrial visits and training programs is an added advantage to strengthen the curricular inputs.
- In every academic break the management tries to upgrade faculty teaching skills by organizing Refreshed courses, Expert lectures and meetings,Workshops, Faculty Development Program (FDP)s.

| File Description | Document |
| --- | --- |
| Any additional information | View Document |
| Link for Additional Information | View Document |

## 1.1.2 Number of certificate/diploma program introduced during the last five years

**Response:** 4

1.1.2.1 **Number of certificate/diploma programs  introduced  year-wise during the last five years**

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| --- | --- | --- | --- | --- |
| 2 | 0 | 0 | 2 | 0 |

| File Description | Document |
| --- | --- |
| Minutes of relevant Academic Council/BOS meetings | View Document |
| Details of the certificate/Diploma programs | View Document |
| Any additional information | View Document |

## 1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

**Response:** 7.16

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| --- | --- | --- | --- | --- |
| 2 | 2 | 2 | 2 | 2 |

| File Description | Document |
|---|---|
| Details of participation of teachers in various bodies | [View Document](#) |
| Any additional information | [View Document](#) |

## 1.2 Academic Flexibility

**1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years**

**Response:** 30

1.2.1.1 How many new courses are introduced within the last five years

Response: 3

| File Description | Document |
|---|---|
| Minutes of relevant Academic Council/BOS meetings. | [View Document](#) |
| Details of the new courses introduced | [View Document](#) |
| Any additional information | [View Document](#) |

**1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented**

**Response:** 100

1.2.2.1 Number of programs in which CBCS/ Elective course system implemented.

Response: 10

| File Description | Document |
|---|---|
| Name of the programs in which CBCS is implemented | [View Document](#) |
| Minutes of relevant Academic Council/BOS meetings. | [View Document](#) |
| Any additional information | [View Document](#) |

**1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years**

**Response:** 15.73

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 210     | 215     | 250     | 82      | 92      |

| File Description | Document |
|------------------|----------|
| Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs | [View Document](#) |
| Any additional information | [View Document](#) |

## 1.3 Curriculum Enrichment

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

**Response:**

The institute is trying its level best to integrate cross-cutting issues relevant to Gender, Environment Sustainability, Human Values and Professional Ethics along with the University prescribed curriculum. The University Syllabus includes courses on Environmental Studies and Professional Ethics and Human Values. Further, the college has taken following initiatives to integrate such sensitive issues:

- We assure that there is no gender bias in terms of admissions, employment, training programs, sports activities so that the gender issues do not arise.
- As the women are deserved for the due importance the women faculty and students are encouraged to participate in the events focusing on women empowerment and promotion of leadership qualities.
- Conduction of the women's day celebrations in the campus every year conducting the competitions on various cultural and sports activities both women faculty and students, conferring the awards and rewards by the chief guest of the event show how the women are very equals or a bit above to the men in the campus.
- Being in their own limitations both boys and girls move with close association in various co-curricular activities such as paper presentations, organization of paper contests, group discussions and technical quiz programmes under the guideline of the faculty concerned.
- Students have the basic required knowledge on Environmental Science and Engineering by the virtue of their course and the environment day is celebrated to promote the awareness on environment protection and many supporting programs are arranged for every now and then like plantation program, conservation of the water etc.
- The literary committee takes up the activity of conducting debate, group discussion and quiz on various special occasions of National and Cultural festivals with the subject relevance.
- Various NSS activities are held up for the environmental protection and ecological preservation.
- The course of professional ethics and human values and IPR and human rights serve for the all

round development of the human being in full sense.

| File Description | Document |
|---|---|
| Any Additional Information | View Document |
| Link for Additional Information | View Document |

## 1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years

**Response:** 70

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 70

| File Description | Document |
|---|---|
| Details of the value-added courses imparting transferable and life skills | View Document |
| Brochure or any other document relating to value added courses. | View Document |
| Any additional information | View Document |

## 1.3.3 Percentage of students undertaking field projects / internships

**Response:** 11.72

1.3.3.1 Number of students undertaking field projects or internships

Response: 135

| File Description | Document |
|---|---|
| List of students enrolled | View Document |
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |

## 1.4 Feedback System

**1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and 5)Parents for design and review of syllabus-Semester wise/ year-wise**
**A.Any 4 of the above**

**B.Any 3 of the above**

**C. Any 2 of the above**

**D. Any 1 of the above**

**Response:** C. Any 2 of the above

| File Description | Document |
|---|---|
| Any additional information | View Document |
| Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management | View Document |
| URL for stakeholder feedback report | View Document |

**1.4.2 Feedback processes of the institution may be classified as follows:**
**A. Feedback collected, analysed and action taken and feedback available on website**

**B. Feedback collected, analysed and action has been taken**

**C. Feedback collected and analysed**

**D. Feedback collected**

**Response:** B. Feedback collected, analysed and action has been taken

| File Description | Document |
|---|---|
| Any additional information | View Document |
| URL for feedback report | View Document |

# Criterion 2 - Teaching-learning and Evaluation

## 2.1 Student Enrollment and Profile

### 2.1.1 Average percentage of students from other States and Countries during the last five years

**Response:** 1.56

2.1.1.1 Number of students from other states and countries year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 19 | 19 | 20 | 11 | 14 |

| File Description | Document |
|------------------|----------|
| List of students (other states and countries) | [View Document](#) |
| Institutional data in prescribed format | [View Document](#) |
| Any additional information | [View Document](#) |

### 2.1.2 Average Enrollment percentage (Average of last five years)

**Response:** 52.95

2.1.2.1 Number of students admitted year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 304 | 320 | 419 | 327 | 272 |

2.1.2.2 Number of sanctioned seats year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 654 | 654 | 654 | 654 | 492 |

| File Description | Document |
|------------------|----------|
| Institutional data in prescribed format | [View Document](#) |
| Any additional information | [View Document](#) |

**2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years**

**Response:** 50.21

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 105 | 75 | 134 | 115 | 111 |

| File Description | Document |
|------------------|----------|
| Institutional data in prescribed format | [View Document](#) |
| Any additional information | [View Document](#) |

## 2.2 Catering to Student Diversity

**2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners**

**Response:**

The Convenor, APEAMCET, admits first year B.Tech students through single window system based on their EAMCET ranks and the Convenor, APPGECET, admits first year M.Tech students through single window counselling based on APPGECET Ranks.

After admission notification and completion of counselling process, the institution conducts the orientation program for one week duration to the newly admitted students as per the regulations of JNTUK and State Government. During the orientation programme the Mentors / Counsellors understand the learning ability of the students and to understand the special needs of the students like communication skills. Further, the students are categorised on their performance in previous exams.

For the case of the slow learners the mentor comes to act as a guide and philosopher finds the nature and intensity of the problems and motivates them in a friendly way to reach particular academic goals. For the special improvement on the students' academic performance additional teaching hours are conducted either to clear the doubts or re-explaining the difficult concepts.

In case of advanced learners, special appraisals were given to the students, for those who are identified with better performance by the principal, management, and the heads of the concerned departments. Thereby it has been possible to achieve the set goals.

The institution succeeded in providing the learning facilities that contribute to their academic and personal growth. The institution also encourages the students to participate in various activities like seminars,

workshops, and literary competitions. The institute provides equal weightage to both curricular and co-curricular& extra-curricular activities.

The above process helps to bring out the following outcomes:

- Students' comprehension on their selected domain
- Better pass percentage with better aggregation of marks.
- Handling the real time Projects.
- To keep the students with crystal clarity either for placements or for higher studies.

| File Description | Document |
|---|---|
| Any additional information | View Document |
| Link for Additional Information | View Document |

**2.2.2 Student - Full time teacher  ratio**

**Response:** 7.07

**2.2.3 Percentage of differently abled students (Divyangjan) on rolls**

**Response:** 0.17

2.2.3.1 Number of differently abled students on rolls

Response: 2

| File Description | Document |
|---|---|
| List of students(differently abled) | View Document |
| Institutional data in prescribed format | View Document |
| Any other document submitted by the Institution to a Government agency giving this information | View Document |
| Any additional information | View Document |

## 2.3 Teaching- Learning Process

**2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences**

**Response:**

To be an affiliated college of JNTUK, Kakinada University, the college has adopted many measures to groom the students more responsible towards our mother Nation despite of limited curriculum of the

university. **Field Projects, Internships, Fabrication based Real Time Engineering Problems, Coding Competitions, Industry based Expert Lectures, Online Tests, etc. are the part of the curriculum to enhance experiential learning, participative learning and problem solving methodologies.**

Tutorial classes and utilization of the multimedia teaching aids like videos, online materials and PPTs are incorporated in the day-to-day teaching learning process that enables the students' understanding of the subject.

**A mini theatre has been arranged to screen the technological updates under the supervision of faculty concerned, approved by the HOD and the Principal.**

Guest lectures by expertise from the industry and academia are organized by the respective departments, for the transformation of the knowledge beyond the prescribed syllabus.

Students are facilitated to enhance their knowledge and skills by the webinars arranged by the college management.

As the part of the curriculum, Communication Language laboratory has been arranged for students to improve their effective English communication and proficiency besides the arrangement of the soft skills training slots in the time table, where the students are trained properly by the expertise to improve their presentation and communication skills.

The management encourages the administration to organize Fests, Symposiums(**CHEC SPOORTHY POLYFEST**, etc) where the student participate in the inter collegiate events like project contests to explore the students innovative abilities.

**The college Fest under the name CHEC SPOORTHY (an independent event) has been organised for the past six years by our students are voluntarily with the stand of the management and faculty.**

The management has arranged industrial visits and value added courses to give hands-on experience to the students. Our campus is enabled with Wi-Fi facility that allows students to access technical resources.

In view of moulding the students with multi dimensional personal traits the college has formed the NSS unit and involved the volunteers in various socio, cultural service oriented activities.

The college management has given the enormous support to the maintenance of a state of art central library, which is equipped with a number of volumes of the books on the core areas and e-books, technical magazines, journal, e-journals and NPTEL lecture videos which serves as a knowledge resource centre.

**The students and faculty are motivated to register for online NPTEL Certificate courses in addition to their regular curriculum. The management reimburses 50% of the examination fees if they score more than 80% and 100% reimbursement for those who score more than 90%.**

The management encourages the faculty to use modern teaching pedagogy, besides conventional classroom teaching practices. The computer laboratories with Internet Connection allow the students to sharp their knowledge and skills. Faculty, to be the part of teaching involve the students in group discussions, seminars, presentations for better understanding of concepts.

| File Description | Document |
|---|---|
| Link for Additional Information | [View Document](#) |

**2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.**

**Response:** 42.94

2.3.2.1 Number of teachers using ICT

Response: 70

| File Description | Document |
|---|---|
| List of teachers (using ICT for teaching) | [View Document](#) |
| Any additional information | [View Document](#) |
| Provide link for webpage describing the " LMS/ Academic management system" | [View Document](#) |

**2.3.3 Ratio of students to mentor for academic and stress related issues**

**Response:** 17.72

2.3.3.1 Number of mentors

Response: 65

| File Description | Document |
|---|---|
| Any additional information | [View Document](#) |

**2.3.4 Innovation and creativity in teaching-learning**

**Response:**

The college campus has been the platform for the innovative academic practices in view of generating the special interest in the student community towards the institution. The teaching learning is considered to be an interactive activity and the following are the few practices to make teaching learning innovative and creative

- Use of ICT facilities like LCD Projects for Interactive Presentation of Lessons
- Project based learning in select subjects
- Outcomes based education
- Use of NPTEL course materials and also encouragement of students to participate in such MOOCs
- Effective Library utilization
- Responsive Assignments for students

- Conduction of Workshops / Add on Courses / Guest Lectures
- Laboratory Demonstrations
- Supply of Well Documented Notes for ease of learning
- Field Trips / Field Projects for Civil / Mechanical / EEE Students
- Coding Competitions to improve programming skills
- Use of IIT Bombay Virtual Labs

## 2.4 Teacher Profile and Quality

### 2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

**Response:** 100.16

| File Description | Document |
|---|---|
| Year wise full time teachers and sanctioned posts for 5 years | |
| Any additional information | |

### 2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

**Response:** 3.67

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 5 | 5 | 5 | 5 | 5 |

| File Description | Document |
|---|---|
| List of number of full time teachers with PhD and number of full time teachers for 5 years | |
| Any additional information | |

### 2.4.3 Teaching experience per full time teacher in number of years

**Response:** 10.83

2.4.3.1 Total experience of full-time teachers

Response: 1766

### 2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State,

**National, International level from Government, recognised bodies during the last five years**

**Response:** 15.76

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 5 | 5 | 4 | 4 | 4 |

| File Description | Document |
|------------------|----------|
| Institutional data in prescribed format | [View Document](#) |
| e-copies of award letters (scanned or soft copy) | [View Document](#) |

**2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years**

**Response:** 18.51

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 35 | 27 | 24 | 22 | 21 |

| File Description | Document |
|------------------|----------|
| List of full time teachers from other state and state from which qualifying degree was obtained | [View Document](#) |
| Any additional information | [View Document](#) |

## 2.5 Evaluation Process and Reforms

**2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level**

**Response:**

1. The performance of a student in each semester shall be evaluated subject – wise with a maximum of 100 marks for theory subject and 75 marks for practical subject. The project work shall be evaluated for 200 marks.
2. For theory subjects the distribution shall be 30 marks for Internal Evaluation and 70 marks for the

End - Examinations.

3. For theory subjects, during the semester there shall be 2 tests. The weightage of Internal marks for 30 consists of Descriptive – 15, Assignment - 05 (Theory, Design, Analysis, Simulation, Algorithms, Drawing, etc. as the case may be and for Physics, Virtual Labs to be considered as Assignments) Objective -10 (Conducted at College level with 20 Multiple choice question with a weightage of ½ Mark each). The objective examination is for 20 minutes duration. The subjective examination is for 90 minutes duration conducted for 15 marks. Each subjective type test question paper shall contain **3 questions** and all questions need to be answered. The Objective examination conducted for 10 marks and subjective examination conducted for 15 marks are to be added to the assignment marks of 5 for finalizing internal marks for 30. Internal Marks can be calculated with 80% weightage for best of the two Mids and 20% weightage for other Mid Exam As the syllabus is framed for 6 units, the 1st mid examination (both Objective and Subjective) is conducted in 1-3 units and second test in 4-6 units of each subject in a semester.

4. For practical subjects there shall be continuous evaluation during the semester for 25 internal marks and 50 end examination marks. The internal 25 marks shall be awarded as follows: day to day work - 10 marks, Record-5 marks and the remaining 10 marks to be awarded by conducting an internal laboratory test. The end examination shall be conducted by the teacher concerned and external examiner.

5. Out of a total of 200 marks for the project work, 60 marks shall be for Internal Evaluation and 140 marks for the End Semester Examination. The End Semester Examination (Viva – Voce) shall be conducted by the committee. The committee consists of an external examiner, Head of the Department and Supervisor of the Project. The evaluation of project work shall be conducted at the end of the IV year. The Internal Evaluation shall be on the basis of two seminars given by each student on the topic of his project and evaluated by an internal committee.

6. For the subject having design and / or drawing, (such as Engineering Graphics, Engineering Drawing, Machine Drawing) and estimation, the distribution shall be 30 marks for internal evaluation ( 20 marks for day – to – day work, and 10 marks for internal tests) and 70 marks for end examination. There shall be two internal tests in a Semester and the Marks for 10 can be calculated with 80% weightage for best of the two tests and 20% weightage for other test.

| File Description | Document |
|---|---|
| Link for Additional Information | [View Document](#) |

**2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety**

**Response:**

The internal Examinations for both theory and online conducted to the norms of the university. The status of the regularity and academics are brought to the notice of the parents with periodical observation. After evaluation process answer scripts of the examination are returned to the students for the verification and avoiding the discrepancies. The College management is cautious to verify and update all the requirements. They made the students to be aware of examination procedure evaluation system, challenging evaluation etc.

1. For theory subjects, during the semester there shall be 2 tests. The weightage of Internal marks for

30 consists of Descriptive – 15, Assignment - 05 (Theory, Design, Analysis, Simulation, Algorithms, Drawing, etc. as the case may be and for Physics, Virtual Labs to be considered as Assignments) Objective -10 (Conducted at College level with 20 Multiple choice question with a weightage of ½ Mark each). The objective examination is for 20 minutes duration. The subjective examination is for 90 minutes duration conducted for 15 marks. Each subjective type test question paper shall contain **3 questions** and all questions need to be answered. The Objective examination conducted for 10 marks and subjective examination conducted for 15 marks are to be added to the assignment marks of 5 for finalizing internal marks for 30. Internal Marks can be calculated with 80% weightage for best of the two Mids and 20% weightage for other Mid Exam As the syllabus is framed for 6 units, the 1st mid examination (both Objective and Subjective) is conducted in 1-3 units and second test in 4-6 units of each subject in a semester.

2. For practical subjects there shall be continuous evaluation during the semester for 25 internal marks and 50 end examination marks. The internal 25 marks shall be awarded as follows: day to day work - 10 marks, Record-5 marks and the remaining 10 marks to be awarded by conducting an internal laboratory test.

3. For the subject having design and / or drawing, (such as Engineering Graphics, Engineering Drawing, Machine Drawing) and estimation, the distribution shall be 30 marks for internal evaluation ( 20 marks for day – to – day work, and 10 marks for internal tests) and 70 marks for end examination. There shall be two internal tests in a Semester and the Marks for 10 can be calculated with 80% weightage for best of the two tests and 20% weightage for other test and these are to be added to the marks obtained in day to day work.

4. For the seminar, Each student has to be evaluated based on the presentation of any latest topic with report of 10-15 pages and a ppt of min 10 slides. The student shall be evaluated by the Departmental committee.

5. Laboratory marks and the internal marks awarded by the College are not final. The marks are subject to scrutiny and scaling by the University wherever felt desirable. The internal and laboratory marks awarded by the College will be referred to a Committee.

| File Description | Document |
|---|---|
| Any additional information | View Document |
| Link for Additional Information | View Document |

## 2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

**Response:**

The management conducts the special program in the first week of the semester on the examination procedure and evaluation processes. The college follows the norms of the university for the examination pattern i.e., 70% marks for the end semester exams and 30% for internal marks. The performance particulars of the students in theory and online mid examinations are uploaded in JNTUK, Kakinada University web portal. On every turn day-to-day attendance performance of the students is periodically updated in the JNTUK, Kakinada university web portal. The College organise the Parent-Teacher meeting and make the parents to be aware of their ward's, appraisals through JNTUK, Kakinada university web

portal. The faculty, being the councillors take care on several aspects like monitoring the regularity of attendance, performance of the students in both internal evaluation tests and external evaluation tests.

For the end semester examination results, there is a provision of Recounting, Revaluation and Challenge Evaluation at the University Level. The students may opt for the same by paying prescribed fee.

| File Description | Document |
|---|---|
| Any additional information | View Document |
| Link for Additional Information | View Document |

**2.5.4 The institution adheres to the academic calendar for the conduct of CIE**

**Response:**

The management adhered to follow the academic calendar prescribed by JNTUK, Kakinada University inserting our program schedule which is useful for the all round development of the students. On getting the release of the university academic calendar with the planning of curricular and co-curricular activities according to the norms of the university, the management, committees of the concerned student council of the college, head of the institution and the heads of the departments discuss and prepare the university based our institution academic calendar in advance to the commencement of the class work in a semester. The academic calendar of the institution includes schedule of curricular activities, assessment dates, technical events, class tests, submission of mark lists, lists of holidays, extracurricular activities and the list of the programs for CRT and other student useful activities and prepares the time table for every class. They check the lesson plan, teaching methodology and materials suited to the syllabus framed by each faculty before start of the semester. The lesson plan includes the content learning aid methodology, faculty approach, course outcomes and utilization of the resources for the practical approach. The special administrative-teaching body checks the lesson plans, time duration, execution through the heads of the department and suggest that corrective actions for the areas that are not up to the mark.

| File Description | Document |
|---|---|
| Any additional information | View Document |
| Link for Additional Information | View Document |

## 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 on website and communicated to teachers and students**

**Response:**

The Program Outcomes, Program Specific Outcomes and Course Outcomes are prepared as per the guidelines of National Board of Accreditation of India and correspondingly Outcome Based Education System is planned to be followed. All the outcomes are well documented and displayed at Institute Notice Boards, Laboratories and Website of the College and hence dissemination to all stake holders. In the later stage, the outcomes are measured for taking necessary action to strengthen the Program Outcomes / Program Specific Outcomes / Course Teaching Methodology.

**The Program Outcomes of an Engineering Graduates as per National Board of Accreditation are classified as:**

- **PO**1. **Engineering knowledge**
- **PO**2. **Problem analysis**
- **PO**3. **Design/development of solutions**
- **PO**4. **Conduct investigations of complex problems**
- **PO**5. **Modern tool usage**
- **PO**6. **The engineer and society**
- **PO**7. **Environment and sustainability**
- **PO**8. **Ethics**
- **PO**9. **Individual and team work**
- **PO**10. **Communication**
- **PO**11. **Project management and finance**
- **PO12. Life-long learning**

**The following are the Program Specific Outcomes of Computer Science and Engineering are as follows:**

- PSO1: Understand the principles, architecture and organization of computers, embedded systems and computer networks.
- PSO2: Apply mathematical foundations, algorithmic principles, and computer science theory in the modelling and design of computer-based systems that include both hardware and software.

**The following are the Program Specific Outcomes of Mechanical Engineering Graduates**:

- **PSO1: Employability:** Students acquire technical and managerial skill that make them an employable graduate.
- **PSO2: Research:** Students acquire theoretical background of each course that they are capable of applying it for solving real-time (Physical) problems.

**The following are the Program Specific Outcomes of Civil Engineering Graduate**

- **PSO1:** Enhancing the employability skills by making the students capable of qualifying National level competitive examinations
- **PSO 2:** Competency in professional and Industrial areas
- **PSO 3:** Inculcating in students tech saviness to deal with practical aspects of civil engineering

**The following are the Program Specific Outcomes of Electrical and Electronics Engineering Graduates:**

- **PSO1:** Develop models, design, analyse and assess the performance of different types of electrical machines, control systems and generation, transmission, distribution, protection mechanisms in power systems.

- **PSO2:** Demonstrate knowledge and hands-on competence in the application of circuit analysis and design, associated software and applications, analog and digital electronics and microcontrollers to build, test, operate and maintain electrical and electronic systems

## Program Specific Outcomes (PSOs) of the E.C.E. Department?

- **·PSO1:** The ability to absorb and apply fundamental knowledge of core Electronics and Communication Engineering subjects in the analysis, design, and development of various types of integrated electronic systems as well as to interpret and synthesize the experimental data leading to valid conclusions.
- **PSO2:** Competence in using electronic modern IT tools (both software and hardware) for the design and analysis of complex electronic systems in furtherance to research activities.
- **PSO3:** Excellent adaptability to changing work environment, good interpersonal skills as a leader in a team in appreciation of professional ethics and societal responsibilities

| File Description | Document |
| --- | --- |
| Link for Additional Information | [View Document](#) |

## 2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

**Response:**

**Attainment of Programme Outcomes, Program Specific Outcomes and Course Outcomes:**

The programme outcomes are achieved through the mandatory and elective courses offered in the curriculum. Each course defines a set of course outcomes that address a subset of the POs. The course instructors identify their course's contribution towards each programme outcome in the form of a CO-PO mapping matrix. The strength of the correlation is obtained by counting the number of X's in each of the columns corresponding to programme outcomes.

*Process for assessing attainment of course outcomes:* Course outcomes are assessed using direct methods. The assessment tool/method to be used for each course outcome is identified in the course plan. The attainment of each course outcome can be assessed macro levels. Macro-level assessment is used for assessing program outcome attainment using direct method.

**Macro level assessment:** At the macro level, we find out the general performance level of students in Semester End examination (SEE). The performance of students in a course is determined by the letter grades scored in semester end exam. They are used to define the attainment level for the overall course since the grades assigned in SEE is based on (30% CIE marks + 70% of SEE marks). Following table

shows the criteria for assigning letter grades. Actual attainment i.e., course SEE performance index = $(0.35 * O + 0.3 * S + 0.15 * A + 0.1 * B + 0.05 * C + 0.05 * D)/(0.35 * N)$. The overall PO attainment is calculated by the direct assessment of examination results.

The outcome attainment justify the effectiveness of different methods for the attainment of POs. Different methods like interactive lectures, quiz, tutorials, and demonstrations through experiments, group discussions, projects or mini projects, seminars and others can be incorporated as changes in course delivery to improve attainment of program outcomes.

| File Description | Document |
| --- | --- |
| Link for Additional Information | View Document |

**2.6.3 Average pass percentage of Students**

**Response:** 56.37

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 146

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 259

| File Description | Document |
| --- | --- |
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |

## 2.7 Student Satisfaction Survey

**2.7.1 Online student satisfaction survey regarding teaching learning process**

**Response:**

# Criterion 3 - Research, Innovations and Extension

## 3.1 Resource Mobilization for Research

**3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)**

**Response:** 23.3

3.1.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 5.45 | 4.84 | 3.84 | 4.97 | 4.2 |

| File Description | Document |
|------------------|----------|
| List of project and grant details | [View Document](#) |
| e-copies of the grant award letters for research projects sponsored by non-government | [View Document](#) |
| Any additional information | [View Document](#) |

**3.1.2 Percentage of teachers recognised as research guides at present**

**Response:** 3.07

3.1.2.1 Number of teachers recognised as research guides

Response: 5

**3.1.3 Number of research projects per teacher funded, by government and non-government agencies, during the last five year**

**Response:** 3.22

3.1.3.1 Number of research projects  funded by government and non-government agencies during the last five years

Response: 450

3.1.3.2 Number of full time teachers worked in the institution during the last 5 years

Response: 698

| File Description | Document |
|---|---|
| Supporting document from Funding Agency | View Document |
| Funding agency website URL | View Document |

## 3.2 Innovation Ecosystem

**3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge**

**Response:**

*The Chebrolu Engineering College is located in an ambient atmosphere suited to eco friendly campus. The management always extend their support to the staff and the students to explore the abilities for better performance and output by providing advanced infrastructure in all the areas besides comfortable environment. They are ever ready to stand for avoiding the hazards. The number of facilities provided in the Chebrolu Engineering College is as follows:*

**1.** *Incubation Space:* *The management provided furnished air conditioned space to the students. The centre has been spaced with required measurements. Besides that the spacious seminar/conference hall is stretched on the second floor with furnished air conditioned facility.*

**2. Office support:** *The management has provided various advanced, sophisticated materials and facilities to the students We provide various official facilities to our Incubates which are included: High End PCs. with Printer on rental basis Telephone, Telex, Photocopy, Fax and Teleconferencing etc. High Bandwidth Internet Connectivity etc.*

**3. Library and documentation:** *The library has been the asset to the college where it serves for the thousands of the students with thousands of volumes in the knowledge gaining process*

*Advantages of Electronic and Animation Cell: A special room in the cellar has been allotted for the Electronic and Animation activities for the student experimental activities for both UG and PG students. The management bares the expenditure for the materials of the experimental activities.*

**Innovative Creation and Transfer of Knowledge to the Society**

*Agricultural related equipment: The centre has been equipped with designing and fabricating tools where they prepare various equipment tools useful for farmers.*

*Web Design Development Centre: The room has been with a cabin of required measurements in one of the computer laboratories where the students are facilitated for developing the websites for various small and big ventures in and around of Guntur.*

*The following projects have been successfully completed in our incubation centre:*

*Design and Fabrication of Foot Powered Scroll Saw with mini wood turning Lathe*

*Design and Fabrication of Multi Purpose machine*
*Fabrication of the car with two wheeler engine with Reverse Gear*
*Fabrication of  Mini Tractor*
*Design and Fabrication of Paddy Thresher*
*Fabrication of Manually Pedal Operated car*
*Fabrication of power generation through speed breaker*
*Design and Fabrication of Airconditioning with hot water system*
*Design and fabrication of Stair case climibing Trolly*
*Design and Frabication of Automatic Drain Cleaner*
*Electric lifted crane*
*Fabrication of drianage cleaning machine*
*Fabrication of bio hybrid vehicle*
*Fabrication of paper cutting on Geneva mechanism*
*Fabrication of ploughing machine*
*Fabrication of wind powered water lifting pump*

Web image re-ranking using query-specific semantic signatures

Cloud computing

Implementation of Solar Tracking System Using LDR's

WIfi  controlled Robot

Health monitoring system using  IOT

IOT Based Scada Implementation for Industrial applications With Fecncing Security system**.**

Automatic Plant Irrigation system by Using GSM

Speed And Direction Control Stepper Motor Using GSM

Permeable concrete pavements by using reinforcement and geotextiles

Experimental study of the effect of fibres on compressive strength of fibres

Design Of Double Lane Road Bridge

| File Description | Document |
|---|---|
| Any additional information | [View Document](#) |
| Link for Additional Information | [View Document](#) |

**3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years**

**Response:** 10

3.2.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| --- | --- | --- | --- | --- |
| 2 | 2 | 2 | 2 | 2 |

| File Description | Document |
| --- | --- |
| Report of the event | View Document |
| List of workshops/seminars during the last 5 years | View Document |

## 3.3 Research Publications and Awards

**3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research**

**Response:** Yes

| File Description | Document |
| --- | --- |
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |

**3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards**

**Response:** Yes

| File Description | Document |
| --- | --- |
| e- copies of the letters of awards | View Document |
| Any additional information | View Document |

**3.3.3 Number of Ph.D.s awarded per teacher during the last five years**

**Response:** 4

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 4

3.3.3.2 Number of teachers recognized as guides during the last five years

Response: 1

| File Description | Document |
|---|---|
| List of PhD scholars and their details like name of the guide , title of thesis, year of award etc | View Document |

## 3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years

**Response:** 0.91

3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 26 | 19 | 7 | 8 | 67 |

| File Description | Document |
|---|---|
| List of research papers by title, author, department, name and year of publication | View Document |

## 3.3.5 Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years

**Response:** 0.04

3.3.5.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 2 | 1 | 2 | 0 | 0 |

| File Description | Document |
|---|---|
| List books and chapters in edited volumes / books published | View Document |

## 3.4 Extension Activities

### 3.4.1 Extension activities in the neighbourhood community in terms of impact and  sensitising

**students to social issues and holistic development during the last five years**

**Response:**

The management of Chebrolu Engineering College always strives to strengthen the social perspectives by conducting various programs, activities and camps through the NSS Unit. The NSS volunteers of our college won prizes and accolades at various events.

The NSS unit of the college in the JNTU, Kakinada affiliated colleges has the special mark in the locality in making the special medical camp with 60 students as volunteers in every academic year. The NSS student volunteers voluntarily participate in various activities and programs conducted in and around the campus like Swatch Bharath, Road safety awareness program, Anti Ragging Awareness program, road safety management, Tree plantation program and cleaning the agricultural canals etc.

NSS wing of Chebrolu Engineering College organises blood donation camps every year and has won the blood donation award given by the A Unit of Needs Society in August 2015

The data from the NSS Unit of Chebrolu Engineering College is furnished academic year wise as follows:

In the year 2013-2014: NSS wing of college has organised Blood Donation Camp Eye Camp and Social Activity related to creating awareness of consequences of school dropout. Nearly 200 students has participated

In the year 2014-2015: The NSS wing of the college has organised Anti ragging awareness program, , Eye camp and nearly 200 students participated. Yoga day was also celebrated in the college and nearly 200 students participated in this special Program. Also a blood donation camp was organised

In the year 2015-2016: Around 300 students participated as NSS volunteers for the mega event on road safety awareness rally in Guntur. NSS has been organised various events like anti-ragging awareness, medical camp , fire safety seminar. A special Camp for Blood Group Identification was also organised and nearly 300 students participated.

In the year 2017-2018: Nearly 350 students had participated in road safety rally and medical camps was conducted in nearby villages Antiragging awareness camp has been organised in the college. Blood donation camp has been organised on the occasion of Engineers day .

Nearly 100 NSS volunteers, students and staff participated Driving Licence mela . NSS has also conducted awareness of water contamination in near by villages and medical camp was conducted.

| File Description | Document |
|---|---|
| Link for Additional Information | [View Document](#) |

**3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years**

**Response:** 5

3.4.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 1 | 1 | 1 | 2 | 0 |

| File Description | Document |
|------------------|----------|
| Number of awards for extension activities in last 5 years | View Document |
| e-copy of the award letters | View Document |

**3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years**

**Response:** 20

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 8 | 5 | 4 | 2 | 1 |

| File Description | Document |
|------------------|----------|
| Reports of the event organized | View Document |
| Number of extension and outreach programs conducted with industry,community etc for the last five years | View Document |

**3.4.4 Average percentage of students participating in extension activities with Government Organisations,  Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years**

**Response:** 47.76

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-

Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 600 | 520 | 500 | 800 | 100 |

| File Description | Document |
|------------------|----------|
| Report of the event | [View Document](#) |
| Average percentage of students participating in extension activities with Govt or NGO etc | [View Document](#) |

## 3.5 Collaboration

**3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years**

**Response:** 27

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 9 | 9 | 3 | 5 | 1 |

| File Description | Document |
|------------------|----------|
| Number of Collaborative activities for research, faculty etc | [View Document](#) |
| Copies of collaboration | [View Document](#) |

**3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)**

**Response:** 10

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| --- | --- | --- | --- | --- |
| 4 | 1 | 2 | 1 | 2 |

| File Description | Document |
| --- | --- |
| e-copies of the MoUs with institution/ industry/ corporate house | [View Document](#) |
| Details of functional MoUs with institutions of national, international importance,other universities etc during the last five years | [View Document](#) |

# Criterion 4 - Infrastructure and Learning Resources

## 4.1 Physical Facilities

**4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.**

**Response:**

***CHEC have the following adequate facilities available for teaching-learning:*** *The CHEC is having 36 state of the art class rooms, 8 tutorial rooms, 4 seminar halls, 40 Laboratories, and 2 Computer Centres to facilitate the teaching-learning process.*

*Academic activities:* The College is located on a sprawling 10.16 acres of lush green campus with built-up area of 3115.46 square meters. The state-of-the-art infrastructure augments learning and promotes a good teaching-learning environment to the students, faculty and staff. College always provides the well up-to-date facilities, which is required for the academic and extra-curricular activities.

The college has been setup and gradually increased with adequate number of class rooms and laboratories as per norms to continue with any academic activity. Further, every Department has been strengthened their own computing resources as well as departmental library. The Departments have their own specialized software in their laboratories. In addition to the above, the college has a Central Library which is equipped with different National and International journals. Digital Library is an additional advantage for the college. The high-end library server is very useful for the faculty and students in terms of storage of learning material and accessibility. Each of the floors is facilitated with water cooler for students and staff members. Separate Hostel facilities are provided in the campus for both boys and girls in the campus. Campuses are under the surveillance of CCTV cameras

*Laboratories:* Every department of the college are fully equipped with the state-of-the-art technology equipment required for the curriculum. Every department has been facilitated and have their own infrastructure to meet their own requirements. Along with the regular curriculum students are persuaded to handle the project work in the emerging areas. The college has special faculty wing and advanced Research laboratory facilities in specific areas to inculcate research among the students.

*Teaching Learning centres:*

- ***Innovation Centre***
- Professional Societies
- Prototype Modelling R&D Centre

The institution strongly believes that diversified teaching-learning processes would help the institution to become stronger at the formative stages. With such an intention, the above laboratories are established.

*General computer education:* In the present scenario every activity of the students associated with the use of the computers and skill based. Hence the management focus to strengthen the basic computer knowledge and basic skill oriented activities among the students as well as the faculty.

*ICT as a Learning Resource:* Across the college the management has provided 300 computers distributed

to all the departments of the college for the day-to-day usage by the students and faculty. Every department has its own computing facilities to meet the curriculum needs. Laptops are also made available with the departments for faculty usage. Desktop Computers are also provided in staff rooms and departmental library. Every department is facilitated with LCD projectors, Laptops and Overhead projectors for computer aided teaching. Internet is provided for all the departments and computer centres with 100 Mbps bandwidth.

| File Description | Document |
| --- | --- |
| Any additional information | View Document |
| Link for Additional Information | View Document |

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

**Response:**

*Sports:* A spacious play ground is an asset for the sport activities in outdoor structure. There is the special room for the indoor games activities like chess, caroms etc serve for the recreation of the students. Many more outdoor and indoor games activities are engaged by the students in their respective slots. Every year the annual sport events take place in January or February every year, and the students from all over the region participate. The sports in charge in each department and Physical directors prepares and instructs the students for indoor and outdoor sport events. College annually review the sport requirements and facilities, and the new equipment are purchased. Around 7.5 Acres of open area is earmarked for out door sports activities.

*Outdoor and Indoor Games:* The college has sufficient sports infrastructure and the sport tools on the ratio wise for the males and females. The institution has competent and qualified physical director and a female coordinator to train the students participating state and national level universities. The following indoor and outdoor sports facilities in the campus.

- Badminton Court.
- Table Tennis Tables.
- Caroms, Chess, Dart etc.
- Space for cultural Activities.
- Guest rooms for visiting athletes and participants.
- Facilities for Yoga and Meditation
- Cricket Field
- Volley Ball courts
- Basket Ball courts
- Tennikoit
- Football Field
- Hockey Field
- Lawn Tennis
- Handball

*Gymnasium:* The special room for gymnasium activities with advanced instruments for physical fitness is arranged. It is under the control of senior physical director.

*NSS:* The college has NSS Unit in the campus. A well-furnished room and office is arranged with all the tools for NSS activities. The NSS coordinators achieve all the NSS associated activities with the help of 250 students.

*Cultural Activities:* The College has the special cultural committee which looks after about the organisation, provision of the tools, training part for the special participants, arrangements of the activities like skit, dance, singing and the other instrumental activities.

*Yoga:* To be the association of physical fitness and mental recreation the subdivision of the sports branch organise the yoga program in the college premises twice in a semester by the yoga teacher.

*Health and Hygiene:* The College believes "health is wealth". Hence it never fails to render the services to the faculty and students in hygiene atmosphere. There is availability of psychologists and an ambulance service in the campus for all medical emergencies.

| File Description | Document |
|---|---|
| Any additional information | View Document |
| Link for Additional Information | View Document |

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

**Response:** 24.39

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 10

| File Description | Document |
|---|---|
| Number of classrooms and seminar halls with ICT enabled facilities | View Document |
| any additional information | View Document |

**4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.**

**Response:** 24.46

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 28.86 | 46.15 | 36.16 | 49.82 | 29.53 |

| File Description | Document |
|------------------|----------|
| Details of budget allocation, excluding salary during the last five years | [View Document](#) |
| Audited utilization statements | [View Document](#) |
| Any additional information | [View Document](#) |

## 4.2 Library as a Learning Resource

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

**Response:**

The library is automated using SravanSoft library automation software package. The Issue and Returns of Books are handled through this software. The Open Source Library Management Package is installed for successful automation of all the library activities. Furhter, the students can search for the availability of books and reserve a copy through our ILMS. Inter Library Loan is made available through Delnet. The digital library is envisaged through DSpace to create the reposity of student project reports, question papers and other study materials online.The Book Bank facility for SC/ST students is availalble in the library. The library contains in total of 17240 Volumes of 2952 Titles, 55 International/National Journal subscriptions, around 120 e-copies. Further, library hosts around 10 computers which are connected to LAN which in turn feciliates access to various national digital libraries.

| File Description | Document |
|------------------|----------|
| Any additional information | [View Document](#) |

### 4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

**Response:**

The Institution has preserved all the academic books in number of volumes for every publication. It also preserves the rare books, special reports, and knowledge resource related books. These books are enriching the social, cultural, inspirational, and technical awareness to the students, faculty and staff. The library downloads various rare books from Rare Book Society of India (RBSI).These collections are stored and kept to the accessibility of the students and faculty. The library is well stocked by books on competitive

exams like GATE and UPSC .The students prepare from these books and get benefitted for these exams.

The college encourage the students and faculty for e-reading activities to control the material wastage. Thus the library takes the vital role on the development of the student. It is enriched with autobiographies and biographies of great people include scientists, Engineers and leaders. The collection of editorials and important articles from all the national newspapers are displayed in the library to enrich the General Knowledge and Current Affairs of students. Separate racks for IS Codes are provided as reference material to the students to pursue and apply their contents for project work and for additional knowledge.

The management put forward their stance for the provision of all the library facilities. Further, the users use the faculty of accessing e-journals as well as the reprographic facilities in order to meet their requirements. In regular intervals, the librarian collects the recommendations of books for central library and department libraries from the HOD's and faculty members. The management encourages the faculty and the members of library committee to make the visit for the book festivals inorder to purchase the books of relevant importance and the curriculum.

**Further, the Institute is also the member of National Digital Library of MHRD and IIT Kharagpur which in turn hosts good number of rare collections.**

| File Description | Document |
| --- | --- |
| Link for Additional Information | [View Document](#) |

**4.2.3 Does the institution have the following:**

1. e-journals
2. e-ShodhSindhu
3. Shodhganga Membership
4. e-books
5. Databases

**A. Any 4 of the above**

**B. Any 3 of the above**

**C. Any 2 of the above**

**D. Any 1 of the above**

**Response:** B. Any 3 of the above

| File Description | Document |
| --- | --- |
| Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc | [View Document](#) |

**4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)**

**Response:** 3.04

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 2.85    | 2.16    | 2.79    | 2.41    | 4.98    |

| File Description | Document |
|------------------|----------|
| Details of annual expenditure for purchase of books and journals during the last five years | [View Document](#) |
| Audited statements of accounts | [View Document](#) |

**4.2.5 Availability of remote access to e-resources of the library**

**Response:** Yes

**4.2.6 Percentage per day usage of library by teachers and students**

**Response:** 45.63

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 600

| File Description | Document |
|------------------|----------|
| Any additional information | [View Document](#) |

## 4.3 IT Infrastructure

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

**Response:**

The college management upgrades the facilities of the IT infrastructure on the academic requirements from time to time. The management sincerely believes the IT systems are taking the essential role in quality academic delivery, efficient administration and transparent communication. The college continues the push-on this crucial territory to guarantee nonstop and reliable accessibility tuned in to the developing needs and evolving innovations. The college recognise the importance of e-learning and upgrades the transfer speed,

availability and additionally different enhancements. The college has around 450 computers of recent configurations connected on the LAN. There are wi-fi zones availalbe for students to work with their individual gadgets.

The management encourages the staff and students to use the ICT resources including development and use of computer-aided teaching/learning materials. In addition, R&D labs procedural information is made accessible on the LAN. Our entire campus is under CC Camera Surveillance with 85 cameras, and they are connected through LAN.

Details of computerized hardware and software available in the college as ICT resources:

All computers are in LAN with cat 5e 10/100 Mbps internet connectivity with 100 Mbps leased line from BSNL Broadband. In Library 10 Systems are marked for exclusive for Digital Library & Internet Usage.

**LICENSED SOFTWARES:**

- ORACLE Academy Membership
- K-VAN English Language Communications Skills Lab
- Microsoft Windows 2008 Server
- Microsoft Visual Studio
- Open Source: MYSQL, Java Development Kit, Turbo C, Win Runner, WEKA Tool

**TOTAL SERVERS: 2 (IBM X34 Series)**

**TOTAL NODES: 450**

All Labs and Central Computing facilities are connected to LAN.

Website: The site is redesigned at whatever point new data is to be included.

The environment is tailored to the specific teaching/learning needs of each department. Full access is provided to email, the Internet, departmental Intranets and other online sources of services and information through leased line Internet connectivity of 100 Mbps.

E-Learning Courses: College caters to the needs of the faculty and the students by providing the access to e-learning content from NPTEL, K-VAN ELCS Lab, IIT Bombay Virtual Labs etc.,

Wi-Fi facility is provided for the entire campus accessing.

**Updation of Wi-Fi Facilities**

| Bandwidth of leased line connection | ISP | Total Bandwidth |
|---|---|---|
| 100 mbps | BSNL Broadband | 100 Mbps |

| File Description | Document |
|---|---|
| Any additional information | [View Document](#) |

**4.3.2 Student - Computer ratio**

**Response:** 2.56

| File Description | Document |
|---|---|
| Any additional information | [View Document](#) |

**4.3.3 Available bandwidth of internet connection in the Institution (Lease line)**
**>=50 MBPS**

**35-50 MBPS**

**20-35 MBPS**

**5-20 MBPS**

**Response:** >=50 MBPS

| File Description | Document |
|---|---|
| Any additional information | [View Document](#) |

**4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)**

**Response:** Yes

| File Description | Document |
|---|---|
| Facilities for e-content development such as Media Centre, Recording facility,LCS | [View Document](#) |
| Link to photographs | [View Document](#) |

## 4.4 Maintenance of Campus Infrastructure

**4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years**

**Response:** 22.7

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities

excluding salary component year-wise during the last five years (INR in Lakhs)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 24.7    | 44.36   | 33.86   | 43.77   | 29.53   |

| File Description | Document |
|------------------|----------|
| Details about assigned budget and expenditure on physical facilities and academic facilities | [View Document](#) |
| Audited statements of accounts. | [View Document](#) |

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

**Response:**

The maintainance of all the laboratory equipments are carried out by inhouse Hardware Engineering, Electrician, and Technical Support Staff. Anual Maintaiance Contract is given for Generators and UPS. Workhshop superitendent will overlook all these activities.

*Civil Department:* There are FM & HM, surveying, Strength of Materials, Concrete Technology, Geotechnical Engineering lab, Transportation Engineering lab, Engineering geology Environmental Engineering lab and CAD labs are available in CE department**.**

*Mechanical Department:* There are FMHM, Heat transfer, Machine tools, Strength of Materials, Material Science, Thermal Engineering lab, Mobilise & Measurements and CAD labs are available in ME department.

*ECE Department:* There are EDC, Microwave & optical communication, IC&PDC, Microprocessor, DSP & communication labs are available in the ECE department. All the equipment in the lab are being subjected to checking by the concerned lab in charge regularly and by the committee at the end of the semester**.**

*EEE Department:* There are power electronics & power converter lab, electrical circuits & control system lab, simulation of electrical circuits lab electrical machine lab & electrical measurements lab are available in EEE department.

*CSE Department:* There are 4 cabins in the CSE department laboratory. Cabin 1 for data & knowledge engineering lab with 90 systems. Cabin 2 for 'C' programming & database structure lab with 60 systems. Cabin 3 for IT workshop and unified modelling & language lab with 60 systems. Cabin 4 for ELCS lab and project development & internet lab with 60 systems.

*Library:* In a central library books are being maintained properly from the date of inception of college. All the books are being verified periodically on monthly basis by the librarian whether they are damaged.

Library committee checks the volumes of the books at the end of the year.

*Computer Maintenance:* A separate computer maintenance team is available in our institution. They can handle all departmental requirements. In every computer centre separate programmer/technician is recruited and a faculty member acts as in-charge of the centre. If any minor software or hardware problems arise, they are rectified by concerned technicians.

All the equipment in the lab are subjected to checking by the concerned lab in charge regularly and by the committee at the end of the semester**.** In the case of any damage to the apparatus, the same will be rectified by the authenticated service engineer. If not possible it will be replaced by a new one. The labs are maintained with log register and service register.

| File Description | Document |
|---|---|
| Any additional information | [View Document]() |

# Criterion 5 - Student Support and Progression

## 5.1 Student Support

### 5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

**Response:** 72.14

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 835 | 820 | 809 | 674 | 663 |

| File Description | Document |
|------------------|----------|
| Upload self attested letter with the list of students sanctioned scholarships | [View Document](#) |
| Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years | [View Document](#) |

### 5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

**Response:** 14.49

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 322 | 202 | 102 | 98 | 66 |

| File Description | Document |
|------------------|----------|
| Any additional information | [View Document](#) |

### 5.1.3 Number of capability enhancement and development schemes –

    1. For competitive examinations
    2. Career counselling

3. Soft skill development

4. Remedial coaching

5. Language lab

6. Bridge courses

7. Yoga and meditation

8. Personal Counselling

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

**Response:** A. 7 or more of the above

| File Description | Document |
|---|---|
| Details of capability enhancement and development schemes | [View Document](#) |
| Any additional information | [View Document](#) |
| Link to Institutional website | [View Document](#) |

**5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years**

**Response:** 64.97

5.1.4.1  Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 731 | 709 | 659 | 670 | 637 |

| File Description | Document |
|---|---|
| Number of students benefited by guidance for competitive examinations and career counselling during the last five years | [View Document](#) |

**5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years**

**Response:** 15.53

5.1.5.1 Number of students attending  VET year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| --- | --- | --- | --- | --- |
| 90 | 167 | 208 | 188 | 152 |

| File Description | Document |
| --- | --- |
| Details of the students benifitted by VET | View Document |
| Any additional information | View Document |

**5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases**

**Response:** Yes

| File Description | Document |
| --- | --- |
| Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee | View Document |
| Details of student grievances including sexual harassment and ragging cases | View Document |

## 5.2 Student Progression

**5.2.1 Average percentage of placement of outgoing students during the last five years**

**Response:** 20.66

5.2.1.1 Number of outgoing students placed year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| --- | --- | --- | --- | --- |
| 70 | 51 | 41 | 23 | 20 |

| File Description | Document |
|---|---|
| Self attested list of students placed | View Document |
| Details of student placement during the last five years | View Document |
| Any additional information | View Document |

**5.2.2 Percentage of student progression to higher education (previous graduating batch)**

**Response:** 17.39

5.2.2.1 Number of outgoing students progressing to higher education

Response: 36

| File Description | Document |
|---|---|
| Upload supporting data for student/alumni | View Document |
| Details of student progression to higher education | View Document |

**5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)**

**Response:** 68.22

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 34 | 23 | 12 | 10 | 12 |

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 38 | 31 | 19 | 21 | 18 |

| File Description | Document |
|---|---|
| Upload supporting data for the same | View Document |
| Number of students qualifying in state/ national/ international level examinations during the last five years | View Document |

## 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) during the last five years.

**Response:** 15

5.3.1.1 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-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 7 | 5 | 2 | 1 | 0 |

| File Description | Document |
|---|---|
| Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years | View Document |
| e-copies of award letters and certificates | View Document |
| Any additional information | View Document |

### 5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

**Response:**

Chebrolu Engineering College has formed an effective student council system where the students are involved in various decision making policies on academic and administrative bodies. Students committees are intended to make them ambience to express their opinions and thoughts. The student committees promote the culture of student participation in many initiative programs for the education and career development. Here the active students body functioning smoothly with all the other departments and committees with effective coordination. This proves how they are grooming themselves for the sources of leadership. Here we mention below various student council and representative committees in our college are:

**Class Review Committee:** Class Review Committee is formed in every class of the course in both Under Graduate (UG)/Post Graduate (PG) Program combining the faculty and students in the ratio of 1:4. Student members of class review committee help DAC (Departmental Academic Committee) in the process of academic plan implementation of every subject in a semester.

**Students' Welfare & Extra Curricular Activities Committee:** It is the committee formed with the students who are promoted for higher courses. Many innovative welfare and extra curricular activities are planned and effectively executed under the guidance of faculty.

**Library Committee:** Student members of the library committee help in the procurement of text books, journals and other learning material besides keeping their effective participation in the annual verification program.

**Alumni Association:** Every department promotes some active students to have the deep association with the faculty and by the way alumni association is formed. It performs Many activities with great coordination and give their feedback for the effective management of academic program.

**Anti-Ragging committee:** The College forms the anti ragging committee associating the faculty with students in view of promoting the ragging free campus. The student members of the committee take the vital role to prevent the elements of ragging through their monitoring under the guidance of faculty across the campus at the corresponding time slots.

**Grievance Redressal Cell:** The cell is under the supervision of lady faculty with the assistance of two male faculty where they join 4 students from each year, altogether 20 students are working effectively to observe and monitor the female students and fight for redressal of the grievances. The matters of harassment and suppression of any single individual are handled by grievance redressal cell.

**The Women's cell:** The institution encourage the women cell which is formed with senior lady faculty and the female students of various courses. It is mainly intended to empower women and girls in academia through imparting educational, awareness training programmes, to strengthen them towards leadership and self-motivation and to make them confident individuals in career.

| File Description | Document |
|---|---|
| Any additional information | [View Document](#) |
| Link for Additional Information | [View Document](#) |

**5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year**

**Response:** 12.4

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 14 | 13 | 13 | 11 | 11 |

| File Description | Document |
|------------------|----------|
| Report of the event | [View Document] |
| Number of sports and cultural activities / competitions organised per year | [View Document] |
| Any additional information | [View Document] |

## 5.4 Alumni Engagement

**5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years**

**Response:**

The Alumni formation is a  major strength of the institution. The Alumni Association was formed in the year 2014 and formally registered in 2018 under the title "Chebrolu Engineering College Alumni Association" with the Reg. No: 458 of 2018 .The Alumni meet is conducted once in a year, where the Alumni from different branches of the under graduate and post graduate programs share their views and give suggestions for the betterment of their followers. The Alumni meet is hosted by the management generously and the Alumni are honored with Momentos. Such meetings are mutually beneficial for the Institution and the Alumni. This provides an opportunity for the Alumni to meet their friends and act as a bridge for the faculty to share their experience, knowledge and insights. The Alumni visit the institution to deliver Guest lectures and seminars for the students in their areas of expertise and motivate the young minds. Successful entrepreneurs from the Alumnus are invited to talk on their success stories at various occasions of the Institute.

The Alumni also help the final year students of the various streams of engineering, business administration and computer applications to get their project placements and summer internship in their companies or to assist them get it through their reference. They also assist the students for placement in public and private sectors and the regular Alumni association meetings pave the way for the successful placements of the students.

| File Description | Document |
|------------------|----------|
| Any additional information | [View Document] |
| Link for Additional Information | [View Document] |

**5.4.2 Alumni contribution during the last five years(INR in Lakhs)**

**? 5 Lakhs**

**4 Lakhs - 5 Lakhs**

**3 Lakhs - 4 Lakhs**

**1 Lakh - 3 Lakhs**

**Response:** <1 Lakh

| File Description | Document |
|---|---|
| Alumni association audited statements | [View Document]() |

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**5.4.3 Number of Alumni Association / Chapters  meetings held during the last five years**

**Response:** 5

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 |

| File Description | Document |
|---|---|
| Number of Alumni Association / Chapters meetings conducted during the last five years | [View Document]() |
| Any additional information | [View Document]() |
| Report of the event | [View Document]() |

# Criterion 6 - Governance, Leadership and Management

## 6.1 Institutional Vision and Leadership

**6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution**

**Response:**

As the Vision Mission of the college is towards imparting training to Students with proper vision to be a world class engineering college recognized for excellence, innovation and the societal relevance and impact of its pursuits, the governance of the Institution is administered to reflect the effective leadership in tune with the stated vision and mission.

To implement state of teaching –learning process to our students to become resource for addressing industry and societal needs, the management is continuously  developing the infrastructure and providing latest equipment to our students with practical environment of learning, research, creativity and innovation to become global professionals with ethical and moral values. The administration is encouraging for collaborative projects with industry not only to address local rural needs but also to imbibe knowledge to solve national and global needs

A group of intellectuals from industry and academia constitute the Governing Body. The body meets twice in a year to discuss various issues and aspects related to the development of the college. Major decisions which include considering and approving the institution strategic plans to achieve the goals of the institute, are taken by these members.

The Secretary Dr R V Krishnaiah had the vision to develop integrated education that could make valuable contributions to educational systems by bringing relevance, pragmatism, and coordination of the technical education. The Governing council of CHEC is the Institute body in guiding the administration of the institution and making the council of Principal, faculty and students work towards the vision of the institute. Based on the recommendations of the Governing Council, the commencement of new programs, expansion of infrastructure, implementation of strategy and other vital decisions are approved by the GoC and implementation process discussed with the Principal and Heads of the departments for execution. The Chairman of the Institute ensures that at least two meetings per year of the Governing Council are conducted to monitor the progress.

The institution has a strategic plan for improving the existing facilities, initiates to promote  R&D, state of art facilities by means of laboratories, library resources, class rooms, meeting halls and sporting facilities are the usual criteria in the annual plan of the institution. The academic plan (semester wise) is prepared by the Principal after having discussions with the HODs. The scheduling of Conferences ,guest lectures by Industry experts, industrial visits for students,  workshops, seminars, FDPs, Technical association activities, Technical Forum activities, sports tournaments, cultural activities, recruitment and functions is done after having discussions with the HODs, committees formed for the purpose.

The Principal of the institution takes decisions to ensure academic standards in tune with the regulation of the JNTU-Kakinada, an affiliating University. Monthly Institute activities will be discussed by the Principal with the HODs as well as with the faculty. Faculty meetings with the HOD play a pivotal role as the collective suggestions are considered by subsequent decisions by higher management. Governance

changes are transparently implemented based on the needs as per the vision of Institute.

| File Description | Document |
|---|---|
| Link for Additional Information | [View Document](#) |

## 6.1.2 The institution practices decentralization and participative management

**Response:**

It is evident that the Governing Body constitutes eminent academicians from different corners. All the academic functions are decentralized and delegated to various committees with all the stake holders involved. The Principal being the academic head of the institution delegates responsibilities to all the academic heads and hence decentralized and participative management.

**The case study of the preparation of Academic Planner:** The institution works with the method of decentralized governance system. The head of the department has been displays the authority in deciding the activities and delegating the responsibilities to the staff members. The department involves in the framework of timetable, subject allocation, purchase and maintenance of equipment and consumables, organizing conferences, symposia, guest lectures and workshops. The Head of the Department with expertise necessarily involve in making industrial visits, internships and MoUs. The institution functions with collaborative work with the culture of participative management which enables the faculty and students to give their opinion and suggestions for improvement. The academic wing is a decentralised activities are decentralized and decisions are taken based on discussion and deliberations in the class committee meetings, department meetings, faculty meetings, HODs' meetings with Principal. The Principal coordinates with the departments, administration and management.

The principal is alerted to make the academic planner in advance to schedule the academic program in all perspectives and to the Training & Placement activities with the consultation of the Heads concerned. The special meeting for the special program in terms of cultural and sport activities is conducted with Sr. Librarian and the Director of Physical education. The scheduled program is analysed in accordance to the schedule of the affiliating university with the following issues:

- Re-opening for the next academic year
- Working days / test days / model exam days
- Department Symposium /Association activities
- IEEE , ISTE, SAE, IETE, ISA and ISOI activities
- Guest Lectures
- Video Classes
- Industrial Visits
- Internships
- Placement Training
- Internal Quality Audit Days
- External Audit
- FDPs / Workshops / Conferences
- IQAC Meetings

- Min Project Exhibition – III years
- Project Exhibition – Final years
- Green Kalam camp, Blood donation camp, NSS camp
- CHEC SPOORTHY, State Level Chess Tournament and JNTUK University Zonal / Inter – Zonal and Inter– University Sports
- College Function

The schedule is approved by the Principal with the consultation of the Chairman for granting the permission to celebrate various special occasions for the enlightment, awareness and for the all-round development of the student personality. At the department level, the faculty under the super vision of HODs with the association of students cares in designing the academic planning and in running the smart classrooms, use of the video theatres and the seminar halls. Every planning and schedule is recorded properly.

## 6.2 Strategy Development and Deployment

**6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution**

**Response:**

The perspective strategic plan towards the holistic development of enrolled student is the vision of the management. The strategic plan caters to provide world class state of the art infrastructure, enriching faculty skills through participation in faculty development programs, increasing research outputs, enhancing outreach activities, strengthening innovation/incubation centre, providing enterprenuership skills for the studnets and finally safegaruding the interest of all the stake holders.

**Enhancement of Infrastructure:** For every fortnight the management updates about the performance and the progress of the institution to ensure the fulfilment of the goals and persuade for the academic excellence, upgradation of facilities in required areas with standard agenda. All the resolutions are practically implemented to the requirement and enrichment in the teaching-learning process in a broader perspective.

The evolution of the institution can be seen starting with one main block and developing the other blocks year after the year and in creating and expanding infrastructure facilities. The institution is now functioning with three main blocks. At CHEC, the student experiences high values. The management ensures the student benefit of a high quality learning environment that includes spacious classrooms, well-equipped laboratories, state-of-the-art computing facilities, rich and diverse knowledge resource centres, smart class rooms, video theatres, seminar halls, auditoriums, first class sporting facilities with indoor and outdoor complexes, practice and rehearsal halls for cultural activities, feel at home hostel accommodation facilities and extensive facilities for on-campus training and placement. At CHEC, quality education is more than a philosophy; it is the very essence of our existence.

It is the agenda of the institution to promote the ample opportunities for the students and to make the required provisions like enhancing the infrastructure facilities, class rooms, laboratories, and library facilities. Though the institution is existed with required facilities it goes on enriching to the fulfilment of the goals with strategic plans beyond to the syllabus in order to make the student fraternity not only

thorough professionals but also responsible citizens, who can contribute for the development of the society and the nation. The quest for enriching the facilities goes beyond the mandatory facilities to execute activities like a few cited below.

- Entrepreneur Development Cell (EDC)
- Higher Education Cell (covers area/ classrooms for training for UPSC Exams, GRE, TOEFL andothers)
- Centre for Soft Skills and Latest Trends
- Club Activities Discussion Rooms
- Practice Rooms / Green Rooms (for Boys and Girls Separately)
- Retiring Rooms (for Boys and Girls Separately)
- Smart Class Rooms
- Video Theatres

| File Description | Document |
|---|---|
| Strategic Plan and deployment documents on the website | View Document |
| Link for Additional Information | View Document |

**6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism**

**Response:**

The organizational structure of the institution is headed by Secretary/Correspondent. The Principal is governed by the objectives of the governing body and is the head of the Institution. All the Departments are headed by senior faculty members. The head of the Departments oversee all the academic activities and monitor all the teaching and non-teaching staff of their Departments. In addition to this, various committees (16) are formed to monitor and execute specific tasks.

The service rules of the Institute is derived by AICTE/UGC/JNTUK/State Governement rules. For all the faculty members and technical staff AICTE rules are followed for recruitment and promotion. Whereas for non-teaching staff state governement norms are followed. The faculty members are furhter ratified by JNTUK.

The reciprocative management stands as an asset to the system and stakeholders. The Governing Council cares the responsibility of monitoring the implementation of activities in the institutional academic strategic plan. The entire hierarchy from the chairman to the stakeholder work as a team in the cultivation of culture of excellence. "We build a better Nation through Quality Education" is the motto of the institution.

The below is the list of vital activities:

- Adopting the updated and advanced procedures for the teaching learning processes.
- Progress at the department level is monitored by the HODs & HOI.
- Analysis on the feedback from students, Parents and expertise.
- Modifying the requirements depending on the feedback and improving the better services

Meticulous planning ensures to maintain quality in both academic and administrative levels. The branches of CSE, ECE, EEE, ME, CE have been Planned for a NBA.

Principal is the chairperson of administrative and academic activities at the institutional level. Heads of the departments have the responsibility of heading all the administrative and academic activities of the department. The HODs have the free hand in making the academic decisions and to have the financial autonomy in all academic aspects. They are entitled to work in crucial situations. The Principal, HODs and Team leads are sanctioned the required financial freedom to the execution of multiple event scheduled. Different teams and clubs have been formed to run the different programs effectively under the guidance of faculty expertise. The faculty take the pivotal role in moulding, grooming and shaping the members of these teams to be dynamic leaders.

The Recruitment process is held by a special recruitment cell and follows the recruitment process at the end of the every academic year for the following academic year. The special Staff appraisal system is existed in tune with the promotional policies and incentives. The grievance redressal mechanism helps us to serve better by understanding the expectations.

| File Description | Document |
| --- | --- |
| Link for Additional Information | [View Document](#) |

**6.2.3 Implementation of e-governance in areas of operation**

1. **Planning and Development**
2. **Administration**
3. **Finance and Accounts**
4. **Student Admission and Support**
5. **Examination**

**A. All 5 of the above**

**B. Any 4 of the above**

**C. Any 3 of the above**

**D. Any 2 of the above**

**Response:** A. All 5 of the above

| File Description | Document |
|---|---|
| Screen shots of user interfaces | [View Document](#) |
| Details of implementation of e-governance in areas of operation Planning and Development,Administration etc | [View Document](#) |

**6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions**

**Response:**

Principal constitutes  every committee that will be assigned with specific tasks pertaining to the requirements of conducting college functions The leadership of the Principal is required at all levels in preparation and execution of tasks and action plans of the stated mission of the college. These committees in the Faculty Council all of which are involved in ensuring formulation of action plans and incorporation of the same into the institutional strategic plans. Meetings of the Staff Council are organized regularly. The faculty Council takes decisions and makes recommendations according to the Governing body of the Institute. Different committees are formed according to the needs of the college to ensure effective functioning of the college. The committees constituted are not permanent. Members are reshuffled for change of committees for different functions. This enables the members getting familiarized with any kind of activities related to any function. The conduct of functions fosters relationship and nurture unity. Heads of the committees monitor the works and meetings  will be held prior to the tasks .

List Of Committees :

- Admission Committee
- Academic Development Committee
- Canteen & Refreshment Committee
- Maintenance Committee
- College Complaints Committee (against Sexual Harassment - under
- Ordinance XVd)
- Examination Committee
- Fee Concession & Student's Aid Committee
- Estate Garden Committee
- NAAC Committee
- NBA  committee
- Technical Magazine Committee
- College news letter Committee
- Medical Committee
- Placement and Training Cell Committee
- Strategic Planning & Proposal Committee
- Grievance Committee
- Prize Committee
- Prospectus Committee
- Purchase Committee
- Scholarship Committee

- Sports Committee
- Stock Verification Committee
- Cultural Committee
- Student's Union Advisory Committee
- Time-Table Committee
- Website Updating & Maintenance Committee

| File Description | Document |
| --- | --- |
| Link for Additional Information | [View Document](#) |

## 6.3 Faculty Empowerment Strategies

**6.3.1 The institution has effective welfare measures for teaching and non-teaching staff**

**Response:**

**Welfare measures for teaching staff**

- Subsidiary transport facilities
- Waiver of fees up to for teachers' children in the Institution
- Medical leave and Maternity leave
- Supporting for education of the children of the teachers in the group institutions Medical Support from our Indian Medical Systems
- Marriage gifts with the sanction of one week leave
- Cab facilities for Heads of the Department and senior faculty
- Gifts and mementoes during Teachers' Day celebrations
- Sponsoring for attending conference, workshops and FDPs
- Incentive for publication of papers / research articles
- Reward for producing University Ranks
- Cash awards for academic excellence / 100% pass
- Special Study Leave (SSL) to pursue higher education
- Family Get - togethers
- Subsidiary canteen fare for teachers
- Group Insurance

**Welfare schemes for non-teaching staff**

- Educational support to the children of the staff
- Marriage gifts with the sanction of one week leave
- Granting medical leave / maternity leave
- Medical Support
- Free transport facilities
- Skill up gradation opportunities
- Incentive for attending orientation programs, workshops for technical skill up gradation
- Family Get - together

* Incentive for dress materials for non-teaching staff
* Incentive for vehicle utilization or transport allowance for non-teaching staff
* Incentive for dress materials for housekeeping staff
* Subsidiary canteen fare for non-teaching staff
* Group Insurance
* ESI Facility
* EPF Facility

**6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years**

**Response:** 6.04

6.3.2.1 Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| --- | --- | --- | --- | --- |
| 18 | 6 | 9 | 2 | 8 |

| File Description | Document |
| --- | --- |
| Details of teachers provided with financial support to attend conferences,workshops etc during the last five years | [View Document] |
| Any additional information | [View Document] |

**6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years**

**Response:** 9.6

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| --- | --- | --- | --- | --- |
| 11 | 10 | 9 | 10 | 8 |

| File Description | Document |
|---|---|
| Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff | [View Document](#) |
| Any additional information | [View Document](#) |

## 6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

**Response:** 1.93

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 8 | 3 | 3 | 1 | 0 |

| File Description | Document |
|---|---|
| Details of teachers attending professional development programs during the last five years | [View Document](#) |
| Any additional information | [View Document](#) |

## 6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

**Response:**

The management assess the performance of the faculty based on teaching, research oriented activities, publications of the articles in reputed journals, participation in the teamwork, and arrangement of the co curricular and extracurricular activities. They are awarded and appreciated during teachers' day celebrations. This special appraisal system motivates and inspires the staff to excel and put forth the best of their efforts. Staff retention is one among the strengths of the institution. The following API factors are deeply analysed in the appraisal system for teaching staff.

- Experience
- Skill upgradation through participation in Conferences, Workshops, Faculty Development
- Programs and others
- Innovative teaching practices
- Pursuing higher studies (Ph.D, )
- Research activities and obtaining patents
- Result percentage produced in the University Examination

- Publication works in the Scopus indexed / impact factor / e - journals & conference proceedings
- Publication of chapters in books and publication of books.
- Carrying out sponsored projects.
- Mentoring and Counseling methods.
- Feedback from HOD and Principal.
- Feedback from students.
- Establishing rapport with peers.
- Active participation in team work.
- Undertaking new academic ventures and being team leaders.
- Rewards for outstanding achievements in their studies pursued after joining the institution
- Attending specific conferences / workshops / training programs related to cells and clubs, for which they coordinate as team leaders.
- Awards and Rewards for being good academician – state and National level.
- Community service through the institution and outside the institution.
- Participation in conducting extra-curricular activities.

The following factors are deeply analysed in the appraisal system for non-teaching staff

- Experience.
- Skill upgradation through Orientation Programs, Refresher Course, Short Term Courses and Faculty Development Programs.
- Higher Studies.
- Feedback from HOD and the Principal.
- Active participation in team work.
- Work Discipline.
- Outstanding Achievements in their studies.
- Participation in Community services.

| File Description | Document |
|---|---|
| Any additional information | [View Document](#) |

## 6.4 Financial Management and Resource Mobilization

**6.4.1 Institution conducts internal and external financial audits regularly**

**Response:**

The book of accounts of the institution is audited by the Statutory Auditors once in a year. During the course of Audit, all required steps are taken to regularize the accounts and to obtain confirmations for the credit balances, to collect documentary evidences wherever inadequate in respect of payments, compliances of T.D.S. and Statutory Formalities and Reconciliation of Unit wise balances with the Control Accounts and Bank Reconciliations. The copy of the audit report covering all matters related to maintenance of accounts is preserved. Subsequently, the final audit report with audit findings are submitted to the Management. The consolidation of the findings of the Institutions has been completed and the annual returns have been submitted to Income tax Authorities, Registrar of Societies, Andhra Pradesh and to the

other relevant authorities concerned.

| File Description | Document |
|---|---|
| Any additional information | [View Document](#) |

### 6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

**Response:** 12.25

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 6 | 1 | 1.75 | 1.85 | 1.65 |

| File Description | Document |
|---|---|
| Details of Funds / Grants received from non-government bodies during the last five years | [View Document](#) |

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

**Response:**

**Mobilization Fees Collections:** Students take admissions as per the Andhra Pradesh Government prescribed Higher Education norms, 70% of the student admissions through EAMCET and 30% of our student admissions from the Management Quota.

**Term Loan and Hire Purchase Loans:** The institution utilises the loan facilities from Banks with reduced rate of interest by maintaining the liquidity, DSCR and Debt Equity Ratios which are sound and the Loans are availed through SVES.

**Government Grants and Sponsorship Receipts:** The institution gets the regular Grants from various Government Bodies i.e. AICTE, IEDC, DST, Ministry of Drinking water and sanitation and Entrepreneurship Development in Indian Encouraging Trends etc. and the grants are judiciously utilized to meet the recurring and non recurring cost.

**Non Government Bodies and Sponsorship Receipts:** The institution accepts the donations for the welfare of the students and the student s with poor financial background from industries, individuals and Philanthropists for institutional and student individual activities.

**Optimal Utilization Recurring Expenses:** Salary to staff, academic activities and payment of bank interest are done with fees collection.

**Infrastructural development facilities and Building construction works:** At the beginning of every academic year the management plans properly for the budget allocation for up gradation the infrastructural facilities in tune with the modern trends and for construction works. In this regard the institution use the bank loans, corpus donations received from well wishers and philanthropists are judiciously utilized for the same.

For keeping the proper transport provision to both the students and faculty the institution purchases new vehicles and hires the other vehicles in order to provide the facility with the reasonable transport charges to the students.

**Research and project activities:** The management goes on encouraging the faculty and students to explore the new dimensions in the field of research. Many more project activities were encouraged with the interest of the management. Through this the management aims to enhance the quality of socio-economic and environmental conditions of society. The institution extends maximum support to the faculty and the student s in the field of research. The institution has conducted many major Research and Development projects with the donations received from government and non government bodies, institutions, industries, firms, well wishers and philanthropists.

**Seminars, Conferences and Faculty Development Programmes and other co-curricular:** The institution goes on conducting the above mentioned activities with regular intervals covering all the departments on the latest technology, innovations, research, changes and needs for the society.

**Extra-curricular activities:** It is sincerely believed by the management that the academic progress is fully achieved when the students and faculty are enlightened and recreated on psychological perspectives. Hence the management encourages to conduct various sports events for the mental recreation at regular intervals.

**Green Atmosphere:** The management gives the due importance to maintain the cleanliness in the campus and to have the green coverage assisted by our program schedule.

**Bio-waste management expenses:** The institution use the policy of bio waste management effectively as it provides revenues.

## 6.5 Internal Quality Assurance System

**6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes**

**Response:**

All the academic activities are administered by the IQAC. The activities starting from preparation of academic calender to submission of internal assessment marks are monitored by IQAC. Once such case study is given below:

**Introduction of three question paper per course**

- The IQAC body monitors the college examination system effectively for the better improvement with necessary modifications and check-ups.
- There is a centralized examination cell under the headship of senior faculty and expert to manage with computational skills. It conducts the Mid Examinations and the model examinations (Mid Examinations for a period of 1hour and 30 minutes with 15 marks and the model examination for a period of 3 hours with 70 marks) on the schedule.

- The examination cell functions effectively and confidentially in terms of preparation of the subject question paper by the expert and evaluation part monitored by the other faculty experts and conduction of the examination in time and supervising the duties of the invigilators from all the departments etc.
- The examination cell informs to the management about the progress of the students and for the part of the model examinations the re test is conducted for the slow learners with a separate moderate question paper. Thus, the students were encouraged to improve their performance through the model tests.

- Very frequently the examination system and the proceedings are closely checked by the IQAC cell in terms of preparing the assignment questions and three sets of question papers for mid examinations randomly one set of question paper will be given at the time of exam.

- The preparation of multiple question papers for one course with a few repeated questions enables the students getting exposed with more number of possible questions for their end semester examinations, which in turn improves their performance in the university examinations.

**Pre Final year and Final year project exhibition**

- The management has a keen insight to see the projects for the final year students relating to the current trends and challenges of the field. The quality of the project work is monitored even by the IQAC along with department. The qualitative projects were well preserved in the examination cell for the model ones.

- The IQAC suggests the students to plan advancedly in the prefinal year under the mini project and at the occasions their project-expo will be conducted for the awards and rewards in the department wise
- For the program of mini project and main project students are thoroughly guided and they present their views, objectives through the reviews. Each of the team gives two review meetings with a HOD and expertise concerned.
- The students who are scrutinised for their projects will be awarded and rewarded.
- For exploring the latent abilities of the students the expertise offers the current challenges under the project work to the students. It is supervised by IQAC committee. Thus the students are promoted to exhibit their special expo through their projects.

| File Description | Document |
|---|---|
| Link for Additional Information | [View Document](#) |

**6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms**

**Response:**

IQAC of the Institution reviews, analyses and suggest suitable action for improvement after going through the University results, attaingment of course outcomes and program outcomes. IQAC also suggest better teaching process, review the effectiveness of existing methodologies. IQAC meetings are held twice every year.

**Content beyond the syllabus and Skill rack online programming**

- The special orientation program for all the faculty at the beginning of the semester involves to make the effective teaching-learning process under the supervision of HODs, the principal and the management.
- On every month there is the guest lecture in the areas related delivered by the expertise from the industries and the academic stalwarts in the smart class rooms.
- The guest lecturers beyond the syllabus of the class room exposé the students to the industrial requirements. Thus this facilitates the students to have the deep knowledge and to know about the requirement of necessary skills and to know the requirements of placements.
- The interactions with industrial experts enable management to recognise industrial requirements and soft skills required for the students .
- The special training programme the initiated by the management through online test with a view of promoting the students the better placements.
- The IQAC supports a T&P cell to provide the training for the Faculty before implementing it to the students.
- The management encourages the IQAC to provide the Guest lectures on content beyond the syllabus and Skill.

**Video Classes and NPTEL online courses**

- Teaching – learning atmosphere has been aided with smart classrooms lectures, videos and audio-video clippings downloaded on the relevant content.
- Through these video classes students will have thorough understanding of the processes through visual means with maximum impact and this encourages them to focus on their project work too.
- The students response towards the video lectures is very interactive and effective with their questionnaire .
- A regular register is maintained in every semester for the utilization of the video theatre indicating the date and time, branch and year of study. So that all the students are benefited through video sessions.
- The management has provided the NPTEL (National Programme on Technology Enhanced Learning) online courses initiated by IITs and IISc. to standardise the system and promoted the students for getting the registration process both staff and students and provide the special incentives to the students who got more than 80% scores in final examination.
- Under the suggestions of IQAC, the management motivate the staff and students even to repay of the fees they put forward.
- The IQAC is instrumental in executing and implementing the new ventures and programs for the

benefit of the learners in the knowledge acquiring process beyond the syllabus.

| File Description | Document |
|---|---|
| Link for Additional Information | [View Document]() |

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**6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year**

**Response:** 4.4

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 7 | 6 | 9 | 0 | 0 |

| File Description | Document |
|---|---|
| Number of quality initiatives by IQAC per year for promoting quality culture | [View Document]() |
| IQAC link | [View Document]() |

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**6.5.4 Quality assurance initiatives of the institution include:**

1. **Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements**
2. **Academic Administrative Audit (AAA) and initiation of follow up action**
3. **Participation in NIRF**
4. **ISO Certification**
5. **NBA or any other quality audit**

**A. Any 4 of the above**

**B. Any 3 of the above**

**C. Any 2 of the above**

**D. Any 1 of the above**

**Response:** B. Any 3 of the above

| File Description | Document |
|---|---|
| Details of Quality assurance initiatives of the institution | <u>View Document</u> |
| Any additional information | <u>View Document</u> |
| Annual reports of institution | <u>View Document</u> |

**6.5.5 Incremental improvements made during the preceding five years** *(in case of first cycle)* **Post accreditation quality initiatives** *(second and subsequent cycles)*

**Response:**

The institution is striving hard towards excellence in past five years. There is phenominal growth in addition of PG Programs, laboratories, Number of PhD qualified faculty members, number of placements in the Institute, number of fabrication based Projects executed, number of qualified faculty members, improvement in the quality of admission through EAMCET, number of workshops conducted, number of faculty deputed for refresher courses, etc.

- The growth of infrastructure for the audio theatre along with modernisation has been upward.
- The conduction of CHEC SPOORTHY 2K18 by promoting the number of students involved in sports and cultural activities was hosted in our campus with a participation of 200 colleges from all over Andhra Pradesh.
- The IEDC was started for promoting students' research interest. Projects are funded by IEDC of DST and five of the projects initiated through IEDC is with the share of the management in every academic year in addition to five projects sponsored by IEDC.
- Students are encouraged to participate in Hackathon conducted by MHRD.

- Organising the International Conferences/National Conferences and workshops at regular intervals.
- Induction of counselling books for students counselling.
- Getting digitalized in more number of academic operations

| File Description | Document |
|---|---|
| Any additional information | <u>View Document</u> |

# Criterion 7 - Institutional Values and Best Practices

## 7.1 Institutional Values and Social Responsibilities

**7.1.1 Number of gender equity promotion programs organized by the institution during the last five years**

**Response:** 60

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 14 | 16 | 13 | 9 | 8 |

| File Description | Document |
|------------------|----------|
| Report of the event | [View Document](#) |
| List of gender equity promotion programs organized by the institution | [View Document](#) |
| Any additional information | [View Document](#) |

**7.1.2**

1.**Institution shows gender sensitivity in providing facilities such as:**
   1.**Safety and Security**
   2.**Counselling**
   3.**Common Room**

**Response:**

*(A) SAFETY AND SECURITY:* Women protection cell is formed in this institution to prevent the women grievances against the sexual harassment, other misbehavioral attitude with women and any injustice caused by the Gents.

The cell has organized many programmes to protect the interest of women community such as women empowerment, mother's day and woman's day to enlighten the women's role in the domain of science and technology.

*(B) COUNSELING*: Counselling has been striking feature in this college envisioning harmonious roles of the students in various disciplines to adopt gracious manners, respect towards others and finally to get intellectual brilliance on the subject. Counselling is being conducted by each teacher per 20 students twice in a semester and report the parents. A special counselling for ladies is also conducted by expert lady medical practitioner.

*(C) COMMON ROOM:* Separate rest rooms for both boys and girls have been arranged ,incase of any in-health they are advised to take rest and for the serious cases local medical practitioner consultation is arranged. *Rest rooms are with all facilities and ventilation to have the pleasant stay*.

| File Description | Document |
| --- | --- |
| Any additional information | [View Document](#) |

## 7.1.3 Alternate Energy initiatives such as:

### 1.Percentage of annual power requirement of the Institution met by the renewable energy sources

**Response:** 6.67

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

Response: 12000

7.1.3.2 Total annual power requirement (in KWH)

Response: 180000

| File Description | Document |
| --- | --- |
| Details of power requirement of the Institution met by renewable energy sources | [View Document](#) |
| Link for Additional Information | [View Document](#) |

## 7.1.4 Percentage of annual lighting power requirements met through LED bulbs

**Response:** 25

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 7062

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 28248

| File Description | Document |
| --- | --- |
| Details of lighting power requirements met through LED bulbs | [View Document](#) |
| Any additional information | [View Document](#) |

**7.1.5 Waste Management steps including:**
- **Solid waste management**
- **Liquid waste management**
- **E-waste management**

**Response:**

*A) SOLID WASTE MANAGEMENT:* The Solid Waste materials like paper plastic water bottles,wodden remnants paper bottles cardboard packs etc..are handed over to the chebrolu mandal authorities enabling them to fill the pits in special areas and for laying plastic roads.

*(B) LIQUID WASTE MANAGEMENT:* Special techniques' are used for reducing water wastage.

· College has been located among the green pastures of the agriculture land beside the sub canal of Krishna river. Sewage tank waste is separated from bathroom usage water, therefore bathroom waste water and excess rain water and the other waste water is connected to the garden and plants in the campus. Low flush toilets are used in college buildings. RO water plants have been installed in all departments and also in hostels.

*(C) E-WASTE MANAGEMENT:* E-waste is being recycled and reused for further use in the required areas for the institution. The unused E- waste is also handed over to the authorities concerned for the disposals.

· *E-waste management:* Bins are set up in college campus to collect the e-waste. That enable the students to create awareness on e-waste management. E-waste is collected and given to authorized agency (SWACHH) for dismantling and recycling as per NPCB norms.

| File Description | Document |
|---|---|
| Link for Additional Information | [View Document](#) |

**7.1.6 Rain water harvesting structures and utilization in the campus**

**Response:**

*RAIN WATER HARVESTING:* The institution has given the special focus on the utilization of resources. One of them is the rain water resource, that we collect from rains is properly harnessed by various techniques to avoid water scarcity during summer i.e. by building ground tanks soaking pits with the norms of the Govt. By using gravel, sand, red soil and many other absorption methods by the way ground water level is increased.

*Advantages:*

1. Helps in recharging the soil,

2. Improvement in ground water level

3. Improves soil moisture

 4.Easy to Maintain

 5.Reduces soil erosion

6.Electricity saving.

7. It provides an alternative supply during water restriction.

8. Maintains a green cover.

| File Description | Document |
|---|---|
| Link for Additional Information | View Document |

**7.1.7 Green Practices**
* **Students, staff using**
a) **Bicycles**
b) **Public Transport**
c) **Pedestrian friendly roads**
* **Plastic-free campus**
* **Paperless office**
* **Green landscaping with trees and plants**

**Response:**

*A) BICYCLES:* The faculty members and students residing nearby are encouraged to come by bicycles. Thus we prevent the emission of carbon dioxide in the campus /Public places.

 *B) PUBLIC TRANSPORT:* The institution is located beside the road connecting Guntur and bapatla. So we encourage our faculty members and students to use the public transport for safety, security and fuel conservation.

 *C) PEDESTRIAN FRIENDLY ROADS:* The campus has wide, well maintained black top roads, covering every nook and corner of it. Plastic free campus: Use of plastic bags and cups are discouraged in the campus. Even in the canteen usage of steel plates/ leaf plates and steel cups or paper cups are mandatory.

 *D) PAPERLESS OFFICE:* The Management has taken keen interest to make the office a paperless office. The accounts/office and academic information is stored and maintained through systems only. The complete campus is Wi-Fi enabled, making it much easier for paper less activities. Even the official

information and circulars are preferred to be sent only through mails.

 *E) GREEN LANDSCAPING WITH TREES AND PLANTS  PLANTATION:* The institute has taken several measures for planting to make Green Campus. 50% of total area is covered with trees. Tree plantation in the campus is the regular activity of the NSS wing to the create work of committee and saplings of the creative work of the students.

| File Description | Document |
|---|---|
| Link for Additional Information | [View Document](#) |

**7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years**

**Response:** 1.07

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 2.34 | 1.05 | 1.2 | 3.68 | .34 |

| File Description | Document |
|---|---|
| Green audit report | [View Document](#) |
| Details of expenditure on green initiatives and waste management during the last five years | [View Document](#) |

**7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:**

1. **Physical facilities**
2. **Provision for lift**
3. **Ramp / Rails**
4. **Braille Software/facilities**
5. **Rest Rooms**
6. **Scribes for examination**
7. **Special skill development for differently abled students**
8. **Any other similar facility (Specify)**

**A. 7 and more of the above**

**B. At least 6 of the above**

**C. At least 4 of the above**

**D. At least 2 of the above**

**Response:** B. At least 6 of the above

| File Description | Document |
|---|---|
| Resources available in the institution for Divyangjan | [View Document](#) |
| link to photos and videos of facilities for Divyangjan | [View Document](#) |

**7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years**

**Response:** 18

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 4 | 4 | 4 | 3 | 3 |

| File Description | Document |
|---|---|
| Number of Specific initiatives to address locational advantages and disadvantages | [View Document](#) |
| Any additional information | [View Document](#) |

**7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)**

**Response:** 12

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 3 | 3 | 3 | 2 | 1 |

| File Description | Document |
|---|---|
| Report of the event | View Document |
| Any additional information | View Document |

**7.1.12**
**Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff**

**Response:** Yes

| File Description | Document |
|---|---|
| URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics | View Document |

**7.1.13 Display of core values in the institution and on its website**

**Response:** Yes

| File Description | Document |
|---|---|
| Provide URL of website that displays core values | View Document |

**7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations**

**Response:** Yes

| File Description | Document |
|---|---|
| Details of activities organized to increase consciousness about national identities and symbols | View Document |
| Any additional information | View Document |

**7.1.15 The institution offers a course on Human Values and professional ethics**

**Response:** Yes

| File Description | Document |
|---|---|
| Provide link to Courses on Human Values and professional ethics on Institutional website | View Document |

**7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions**

**Response:** Yes

| File Description | Document |
|---|---|
| Provide URL of supporting documents to prove institution functions as per professional code | [View Document] |

**7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years**

**Response:** 13

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|
| 3 | 3 | 4 | 2 | 1 |

| File Description | Document |
|---|---|
| List of activities conducted for promotion of universal values | [View Document] |
| Any additional information | [View Document] |

**7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities**

**Response:**

The institution believes that the real development lies in the growth and sustenance of the cultural and social values inherited from predecessors. To be the part of academic excellence the Institution celebrates various National, communal, occasional festivals along with worth and death anniversaries of the great Indian personalities.

After getting the freedom we celebrate our Independence Day on 15th of August every year. There is national holiday on Independence Day.

The institution conducts the engineers day celebrations to make the students to the competent enough and

for the excellence.

Ø *In view of raising the awareness on the **AIDS,** a notorious disease caused for HIV infection 1st December every year since 1988 is celebrated **World AIDS Day**, in memory of the victims.*

On the eve of the birth anniversary celebrations of the spiritual icon **SWAMI VIVEKANADA** we organise the youth-fest in the month of **January** with various cultural, technical competitions.

It was first declared by the Government of India in the year 1984 to celebrate the birthday of **Swami Vivekananda** as National Youth Day. Since then **(1985)**, it is started celebrating as the National Youth Day all over the country.

In-order to promote electoral awareness and for updating the enrolment of voters the institution conducts national voters day on every January 1st where a citizen can be enrolled as a voter when she/he is 18 years as on **January 1st** of the year electoral rolls are prepared.

Irrespective of the communal discriminations 'the institutions has given the special attention to make the students participating in all semi-festival occasions like **iftar treat**, **semi-Christmas** celebrations and advanced **sankranthi** festival celebrations.

The Republic day in India is greatly celebrated commemorating the spirit and intensions of the constitutional values on **26th of January** every year. Where the new Indian constitution was sketched and approved by the Indian constituent Assembly.

| File Description | Document |
|---|---|
| Any additional information | [View Document](View Document) |

**7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions**

**Response:**

*FINANCIAL TRANSPARENCY:* The management gets its book of accounts audited every year and the audited statement is uploaded in the website. At the beginning of the academic year every department prepares the budget proposal and is brought for the discussion in governing body meeting to get the approval. Budget is disbursed based on the requirement of the department,

*ACADEMIC TRANSPARENCY*: On the directions of academic eminency every department will take resolutions for the academic year plan like subject allocation arranging of guest lecturers organising seminars and workshops. Student counselling sessions will be the hallmark to get the internal assessment of the student calibre.

Proper evaluation methods for followed after the verification to reported to the parents.

*ADMINISTRATIVE TRANSPARENCY:*

**To bring academic transparency among all the stake holder of the TEACHING-LEARNING process, the following process is followed.**

1. To bring awareness about the curriculum and the syllabus, the academic calendar as per the University Code of conduct is provided for the students.
2. To understand the syllabus, the students are facilitated with prepared lesson plans.
3. The study materials are distributed among the students as a part of Teaching-Learning process.
4. The mid semester examinations are conducted in a transparent way and the students are allowed to check their answer sheets to enhance fairly evaluation.
5. Announce of final Internal Assessment Marks for to the students to evaluate their progress.
6. Through student Grievance cell the student complaints are addressed.

*AUXILIARY FUNCTIONS:* For smooth functioning of the institution, different committees are formed to carry out auxiliary functions.

The following committees are in function.

1. Disciplinary committee

2. Anti-Ragging committee

3. Transport committee

4. News letter / Magazine / Brochure / Calendar committee

5. Cultural committee

6. Sports committee

7. Time table committee

8. Alumni council committee

9. Central library committee

10. Maintenance committee

11. Training & Placement committee

12. Data acquisition and maintenance Committee

13. Affiliation and accreditation committee

14. Community development committee

15. Public relations committee

16. Research and development committee

17. Entrepreneur development cell

18. Grievances redressal committee

19. Internal complaints committee for prevention of sexual harassment of women

20. Students club

21. SC / ST Cell,

22. OBC Cell,

23. Minority Cell

24. Internal quality and assurance committee

25. Students affairs committee

26. faculty recreation club committee

| File Description | Document |
|---|---|
| Any additional information | [View Document](#) |

## 7.2 Best Practices

**7.2.1 Describe at least two institutional best practices (as per NAAC Format)**

**Response:**

*Best Practice 1*

*Title of the Practice:* **Encouraging Students to Participate in Fabrication based Real Time Engineering Projects through In-house Funding**

**Objectives of the practice:**

- To make the students associating their skills, knowledge and competencies for various activities through the system of education.
- To make the students gain hands on experience which help them career development.
- To equip the students with knowledge of research methods and applying to the need of the society through the contribution of technology for the improvement of socio-cultural settings and for the transformation of technical knowledge.

**The Context:**

- The management viewed that just theoretical knowledge is not enough to make the students cope with the required level of competitions in the open market.

**Practice:**

- The students are encouraged to come up with their own creative ideas.
- Regular reviews are held at the department level and resource persons are invited for training the students.
- Financial support required for the project fabrication is provided by the management.
- Regular guidance is provided by the faculty and college alumni.
- Students are encouraged to present their project at college level and state level competitions.

**Problems encountered and resources required:**

- Students completely depend on the management for financial support to complete the projects.
- Due to their hectic academic schedule students could not completely focus on their work.
- Frequent participations is restricted in the competitions due to time constraint.

**Evidence Success:**

- This hands on experience helped the students to secure core jobs in their respective areas.
- Many projects were appreciated and gained recognition by reputed entrepreneur of our district.

*Best Practice 2*

**Project Title: Making the education to be a Source of livelihood through the institution for the down-trodden students**

**Objectives of the practice:**

- To make the students associating their skills, knowledge and competencies for various activities through the system of education.
- To make the students getting their provision of livelihood through their knowledge and cope with the opportunities for their well being.

**The Context:**

- The management viewed the social-cultural milieus of the students is not enough to make the students cope with the required level of competitions in the open market.
- The HODs of the respective departments located the students from less-privileged community and areas, promoted them towards the skilled programs as the special training was arranged by the management on their own initiation like web designing, python programming, data mining, cutting-tools, Surveying etc.

**Practice:**

- The management called for several resource persons for the training sessions.
- Each of the student of the less privileged sections has been provided Rs 10,000/- incentives for the

program outcome.

- The management recommended the Alumni funds to organize the workshops, industrial visits and the other life skills program.

**Problems encountered and resources required:**

- Identification of the students deserved for the support.

**Evidence of Success:**

- The students are able to succeed in their examinations with better pass percentage.

# 7.3 Institutional Distinctiveness

**7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust**

**Response:**

The Vision and Mission of the Institution describe the main objective of the Institution.

Vision: To impart quality engineering education and offering research opportunities to students with high standards, to serve as a valuable resource for the advancement of society and Organizations and impart students with ethical values to become great resource of pride for national and global needs

Mission Statements:

- To implement state of teaching –learning process to our students to become resource for addressing industry and societal needs
- Continuous development of infrastructure and to provide latest equipment to our students with practical environment of learning, research, creativity and innovation to become global professionals with ethical and moral values.
- To collaborative projects with industry not only to address local rural needs but also to imbibe knowledge to solve national and global needs

The Institution has performed uniquely in making the educaion to be a source of livelihood through the institutiional funding for the down-trodden students. Furhter, to inculcate real time engineering practice among the students, the Institution is constracting supporting select students towards preparation and fabrication of engineering products.

Institution is constantly making its sincere efforts to provide placement opportunities for the studnets and the placement statistics are increasing year by year.

In the same line, Stundents have achieved many awards for their amazing acadamic achievements and number of students are placed in different jobs in the leading coorporate companys and organizations.

# 5. CONCLUSION

## Additional Information :

- NPTEL Local Chapter
- Moodle for Online Tests and Mock Test for Placement Preparation
- Project funding for fabrication based projects
- Scholarpships for ecnomically backward students
- Participation in Swatch Bharath Abhiyaan
- Skill Development Programme through PMKVY
- Skill Development Programme through APSSDC
- Adopted Village under NSS
- Use of IIT Bombay Virtual Labs
- Test Centre for many Competitive Examinations

## Concluding Remarks :

Chebrolu Engineering College (CHEC) was established in the year 2008 under the aegis of Sri Visvesvaraiah Educational Society (SVES). The mission of SVES is to deliver Education for the betterment of mankind. Keeping in tune with the mission of the parent society, CHEC set its vision to impart quality engineering education and offering research opportunities to students with high standards, to serve as a valuable resource for the advancement of society and organizations and impart students with ethical values to become great resource of pride for national and global needs. Our missions emerge from the core values of SVES - Encourage Creativity and Innovation, and Provide Employable Education. Based on these core values CHEC has arrived at the long term objectives. These are: (i) To establish a Entrepreneurship Development Cell· (ii) To Deliver Quality Training Programmes Consistently· (iii) To Meet the Requirements of Industry· and (iv) To Recruit the Best Teaching Talent

CHEC , with its valuable human resources, ever-improving infrastructure, improving placements, better teaching learning process and commitment to society recognized as one of the best engineering college by the State Government.