



Yearly Status Report - 2018-2019

Part A

Data of the Institution

| | |
|---|---|
| 1. Name of the Institution | MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) |
| Name of the head of the Institution | Dr. S. SUDHAKARA REDDY |
| Designation | Principal |
| Does the Institution function from own campus | Yes |
| Phone no/Alternate Phone no. | 093481611303 |
| Mobile no. | 9348161125 |
| Registered Email | principal@mrec.ac.in |
| Alternate Email | iqac@mrec.ac.in |
| Address | Maisammaguda, Dhulapally |
| City/Town | Secundrabad |
| State/UT | Telangana |
| Pincode | 500100 |

| 2. Institutional Status | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|------|---------------------------------------|-------------|-------------|-------|-------|------|----------------------|----------|--|-------------|-----------|---|---|------|------|-------------|-------------|---|---|------|------|-------------|-------------|
| Autonomous Status (Provide date of Conformant of Autonomous Status) | 20-Jan-2014 | | | | | | | | | | | | | | | | | | | | | | | | |
| Type of Institution | Co-education | | | | | | | | | | | | | | | | | | | | | | | | |
| Location | Urban | | | | | | | | | | | | | | | | | | | | | | | | |
| Financial Status | Self financed | | | | | | | | | | | | | | | | | | | | | | | | |
| Name of the IQAC co-ordinator/Director | Dr. T. V. Surendranatha Reddy | | | | | | | | | | | | | | | | | | | | | | | | |
| Phone no/Alternate Phone no. | 08885542037 | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile no. | 9440361207 | | | | | | | | | | | | | | | | | | | | | | | | |
| Registered Email | iqac@mrec.ac.in | | | | | | | | | | | | | | | | | | | | | | | | |
| Alternate Email | enghod@mrec.ac.in | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. Website Address | | | | | | | | | | | | | | | | | | | | | | | | | |
| Web-link of the AQAR: (Previous Academic Year) | http://mrec.ac.in/AOAR/AOAR%20AY%202017-18.pdf | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. Whether Academic Calendar prepared during the year | Yes | | | | | | | | | | | | | | | | | | | | | | | | |
| if yes,whether it is uploaded in the institutional website: Weblink : | http://mrec.ac.in/Academics/AcademicsCalendar | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. Accrediation Details | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th rowspan="2">Cycle</th> <th rowspan="2">Grade</th> <th rowspan="2">CGPA</th> <th rowspan="2">Year of Accrediation</th> <th colspan="2">Validity</th> </tr> <tr> <th>Period From</th> <th>Period To</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>A</td> <td>3.01</td> <td>2010</td> <td>28-Mar-2010</td> <td>27-Mar-2015</td> </tr> <tr> <td>2</td> <td>A</td> <td>3.20</td> <td>2015</td> <td>25-Jun-2015</td> <td>24-Jun-2020</td> </tr> </tbody> </table> | | | | | | Cycle | Grade | CGPA | Year of Accrediation | Validity | | Period From | Period To | 1 | A | 3.01 | 2010 | 28-Mar-2010 | 27-Mar-2015 | 2 | A | 3.20 | 2015 | 25-Jun-2015 | 24-Jun-2020 |
| Cycle | Grade | CGPA | Year of Accrediation | Validity | | | | | | | | | | | | | | | | | | | | | |
| | | | | Period From | Period To | | | | | | | | | | | | | | | | | | | | |
| 1 | A | 3.01 | 2010 | 28-Mar-2010 | 27-Mar-2015 | | | | | | | | | | | | | | | | | | | | |
| 2 | A | 3.20 | 2015 | 25-Jun-2015 | 24-Jun-2020 | | | | | | | | | | | | | | | | | | | | |
| 6. Date of Establishment of IQAC | 01-Jul-2010 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. Internal Quality Assurance System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quality initiatives by IQAC during the year for promoting quality culture | | | | | | | | | | | | | | | | | | | | | | | | | |
| Item /Title of the quality initiative by | Date & Duration | | Number of participants/ beneficiaries | | | | | | | | | | | | | | | | | | | | | | |

| IQAC | | |
|--|------------------|------|
| GOOGLE Mobile Developer Fest | 28-Jul-2018 1 | 236 |
| Three Day Training Program on Auto CAD user level | 28-Jul-2018 4 | 42 |
| A National Level Student's Project Expo - VISHESH 2k18 | 15-Sep-2018 1 | 346 |
| Prof William Oakes and Mrs. Heather Fabries visit to MREC(A) | 26-Nov-2018 1 | 127 |
| International Conference on Transformations in Engineering Education | 07-Jan-2019 2 | 448 |
| Techno Cultural Fest - AKSHARA 2019 | 23-Mar-2019 1 | 1345 |
| View File | | |

8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

| Institution/Department/Faculty | Scheme | Funding Agency | Year of award with duration | Amount |
|--------------------------------|-----------------------|----------------|-----------------------------|--------|
| Institution | Autonomous | UGC | 2014 365 | 0 |
| Institution | Unnat Bharath Abhiyan | MHRD | 2018 365 | 50000 |
| View File | | | | |

9. Whether composition of IQAC as per latest NAAC guidelines:

Yes

Upload latest notification of formation of IQAC

[View File](#)

10. Number of IQAC meetings held during the year :

4

The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website

Yes

Upload the minutes of meeting and action taken report

[View File](#)

11. Whether IQAC received funding from any of the funding agency to support its activities during the year?

No

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

Increase in quality research publications
 Monitoring implementation of mandatory induction programme for I B. Tech. students
 MoUs with topnotch industries
 Support ecofriendly measures like Harithaharam
 Necessary followup on prompt implementation of academic calendar

[View File](#)

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

| Plan of Action | Achivements/Outcomes |
|--|---|
| JNTUH affiliation for the academic year 2019 20 | Documents necessary for the affiliation are submitted to the affiliating University, Jawaharlal Nehru Technological University, Hyderabad (JNTUH) |
| Encouraging Research paper publication in reputed journals | Provision of incentives for the faculty for publishing the research papers in reputed journals which are indexed by SCOPUS, Web of Science, SCI etc yielded results. There is a significant increase in the number of quality publications. |
| Hosting ICTIEE 2019 conference | The necessary infrastructure arrangements are renovated. International Conference on Transformations in Engineering Education (ICTIEE 2019) is organized from Jan 7 - 8, 2019. The conference could attract nearly 50 foreign delegates and nearly about 1500 participants. |

[View File](#)

14. Whether AQAR was placed before statutory body ?

Yes

| Name of Statutory Body | Meeting Date |
|------------------------|--------------|
| Board of Governance | 27-Oct-2018 |

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?

Yes

Date of Visit

10-May-2019

| | |
|--|---|
| 16. Whether institutional data submitted to AISHE: | Yes |
| Year of Submission | 2019 |
| Date of Submission | 28-Feb-2019 |
| 17. Does the Institution have Management Information System ? | Yes |
| If yes, give a brief description and a list of modules currently operational (maximum 500 words) | <p>1.SMS gateway to send important notifications to different stake holders. 2. Installation of CCTVs at various parts of the college. 3. Communicating important information to the stakeholders through website and conventional methods. 4.Upgradation of college website with special emphasis on MIS. 5.Paying examination fee through online portal. 6. Anytime Learning system in the Library using online portal. Management Information system is available in the college. It is used for the following Institutional activities. 1.SMS gateway to send important notifications to different stake holders. 2. Installation of CCTVs at various parts of the college. 3. Communicating important information to the stakeholders through website and conventional methods. 4.Upgradation of college website with special emphasis on MIS. 5.Paying examination fee through online portal. 6. Anytime Learning system in the Library using online portal. Malla Reddy Engineering College has an informative website (mrec.ac.in). It aims at providing information to all stakeholders of the college. It has many modules like Academics, Departments, Research, Infrastructure, Examinations, Placements, SAC,IQAC. The Academics module provides information about various programmes offered, admission process and syllabus of each course. The Departments module displays the complete profile of each department like Vision, Mission, Faculty details, Infrastructure Details of department, Events Organized etc. Research module provides information about all the research activities being conducted in the college. Infrastructure module provides information about the</p> |

sophisticated infrastructure facilities available at the college premises like library, hostels, various laboratories, transport facilities etc. Examinations module provides complete information for the students regarding exams like time tables, examination circulars, study materials etc. It also allows the students to check their results. Placements module aims at providing the detailed report of placement activities happening in the college. Students Association Council(SAC) aims at providing information about the extracurricular and co curricular activities of students. The Internal Quality Assurance Cell(IQAC) module provides information about all the academic activities conducted to enhance quality in academics. Apart from these primary modules the website is also integrated with an elibrary. It also provides information about all the activities conducted in the campus. Affiliation information of the college is also displayed in website. Grievance page is also available where stakeholders can report their grievances to the college authorities. Student Dashboard is available wherein students can register and practice various courses which will help them in strengthening their employability skills.

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Design and Development

1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

| Name of Programme | Programme Code | Programme Specialization | Date of Revision |
|-------------------|----------------|---|------------------|
| BTech | 12 | Information Technology | 29/06/2018 |
| BTech | 04 | Electronics and Communication Engineering | 03/07/2018 |
| BTech | 02 | Electrical and Electronics Engineering | 03/07/2018 |
| BTech | 03 | Mechanical Engineering | 28/06/2018 |
| BTech | 25 | Mining Engineering | 28/06/2018 |

| | | | |
|---------------------------|----|-----------------------------------|------------|
| BTech | 05 | Computer Science and Engineering | 29/06/2018 |
| BTech | 01 | Civil Engineering | 29/06/2018 |
| MBA | 1E | Master of Business Administration | 03/07/2018 |
| Mtech | 07 | Electrical Power Systems | 03/07/2018 |
| Mtech | 15 | Machine Design | 28/06/2018 |
| View File | | | |

1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

| Programme with Code | Programme Specialization | Date of Introduction | Course with Code | Date of Introduction |
|---------------------|--------------------------|----------------------|---|----------------------|
| BTech | Nill | Nill | Engineering Mathematics-I -- 80B01 | 29/06/2018 |
| BTech | Nill | Nill | Programming for Problem Solving -- 80501 | 03/07/2018 |
| BTech | Nill | Nill | Basic Electrical and Electronics Engineering -- 80201 | 28/06/2018 |
| BTech | Nill | Nill | Signals and Systems -- 80402 | 03/07/2018 |
| BTech | Nill | Nill | English -- 80H01 | 29/06/2018 |
| BTech | Nill | Nill | Data Structures -- 80503 | 29/06/2018 |
| MBA | Nill | Nill | Human Resource Management -- 8B203 | 03/07/2018 |
| MBA | Nill | Nill | Intellectual Property Rights -- 8B411 | 03/07/2018 |
| MBA | Nill | Nill | Digital Marketing -- 8B315 | 03/07/2018 |
| Mtech | Nill | Nill | Software Process and Project Management -- 85120 | 29/06/2018 |

[View File](#)

1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the Academic year

| Programme/Course | Programme Specialization | Dates of Introduction |
|---------------------------|--------------------------|-----------------------|
| Nil | NILL | Nil |
| View File | | |

1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

| Name of programmes adopting CBCS | Programme Specialization | Date of implementation of CBCS/Elective Course System |
|----------------------------------|---|---|
| BTech | Civil Engineering | 29/06/2018 |
| BTech | Electrical & Electronics Engineering | 03/07/2018 |
| BTech | Mechanical Engineering | 28/06/2018 |
| BTech | Electronics & Communication Engineering | 03/07/2018 |
| BTech | Computer Science and Engineering | 29/06/2018 |
| BTech | Information Technology | 29/06/2018 |
| BTech | Mining Engineering | 28/06/2018 |
| Mtech | Structural Engineering | 29/06/2018 |
| Mtech | Electrical Power Systems | 03/07/2018 |
| Mtech | Machine Design | 28/06/2018 |
| Mtech | Thermal Engineering | 28/06/2018 |
| Mtech | Computer Science and Engineering | 29/06/2018 |
| MBA | Management of Business Administration | 03/07/2018 |

1.3 – Curriculum Enrichment

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

| Value Added Courses | Date of Introduction | Number of Students Enrolled |
|-----------------------------|----------------------|-----------------------------|
| MICRO FOCUS DevOps Training | 13/08/2018 | 45 |
| IOT | 11/03/2019 | 240 |
| PL/SQL | 21/01/2019 | 265 |
| Java Programming | 10/07/2019 | 212 |
| Big Data Analytics | 16/07/2018 | 240 |
| View File | | |

1.3.2 – Field Projects / Internships under taken during the year

| Project/Programme Title | Programme Specialization | No. of students enrolled for Field Projects / Internships |
|-------------------------|--------------------------|---|
| BTech | Civil Engineering | 565 |

| | | |
|---------------------------|---|-----|
| BTech | Electrical & Electronics Engineering | 65 |
| BTech | Mechanical Engineering | 831 |
| BTech | Electronics & Communication Engineering | 385 |
| BTech | Computer Science and Engineering | 976 |
| BTech | Mining Engineering | 112 |
| BTech | Information Technology | 48 |
| Mtech | Structural Engineering | 5 |
| Mtech | Electrical Power Systems | 11 |
| Mtech | Machine Design | 14 |
| View File | | |

1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

| | |
|-----------|-----|
| Students | Yes |
| Teachers | Yes |
| Employers | Yes |
| Alumni | Yes |
| Parents | Yes |

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

| |
|---|
| Feedback Obtained |
| <p>Feedback is collected from all stakeholders. Feedback on faculty, for example, is collected from students at the end of every semester. The feedback form is designed to incorporate depth of knowledge of the subject, presentation skills, sincerity, commitment, regularity, punctuality, syllabus coverage, ability to relate the course to real life situations, ability to generate interest, accessibility of teachers for clarifications outside the class, ability to command and control the class, and overall rating students give their feedback on faculty on the basis of 10 parameters and using a four point scale. The feedback is analyzed by the Heads of departments. In the analysis the HODs compare the feedback of the previous and current semester. If any improvements are called for, the matter is brought to Principal's notice. Then the HOD and Principal share the feedback with the faculty concerned and suggest necessary steps for improvement. Feedback on curriculum is collected from all stakeholders, and the findings are communicated to the respective Boards of studies / Boards of Examiners. Feedback is analysed and suggestions and recommendations are conveyed to the university. Faculty members are appraised of their role in syllabus completion, based on feedback from students. • Students' feedback about each course in a semester is obtained at the end of the semester. • In addition, the feedback on teaching learning is obtained through Course End Survey and Exit surveys from passed out students. • Both Course outcome evaluations and Staff Evaluation are being done through the students' feedback. • Staff Evaluation Reports, Students Feedback Report, Staff Self Appraisal and stakeholders feedback are discussed and corrective measures are planned accordingly. • Employer surveys act as a tool to gain feedback on and measure employee engagement, morale and performance. It measures the point</p> |

of view of faculties and is designed to assess whether it aligns with that of departments. • Alumni and Parents surveys are obtained through a questionnaire during parent, teachers meetings and their suggestions are taken into account for the overall improvement.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

| Name of the Programme | Programme Specialization | Number of seats available | Number of Application received | Students Enrolled |
|-----------------------|---|---------------------------|--------------------------------|-------------------|
| BTech | Civil Engineering | 180 | Nill | 180 |
| BTech | Electrical & Electronics Engineering | 60 | Nill | 60 |
| BTech | Mechanical Engineering | 240 | Nill | 239 |
| BTech | Electronics & Communication Engineering | 180 | Nill | 180 |
| BTech | Computer Science and Engineering | 240 | Nill | 240 |
| BTech | Information Technology | 60 | Nill | 60 |
| BTech | Mining Engineering | 60 | Nill | 48 |
| MBA | MBA | 60 | Nill | 60 |
| Mtech | CE-SE | 24 | Nill | 22 |
| Mtech | EEE-EPS | 24 | Nill | 15 |

[View File](#)

2.2 – Catering to Student Diversity

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

| Year | Number of students enrolled in the institution (UG) | Number of students enrolled in the institution (PG) | Number of fulltime teachers available in the institution teaching only UG courses | Number of fulltime teachers available in the institution teaching only PG courses | Number of teachers teaching both UG and PG courses |
|------|---|---|---|---|--|
| 2018 | 4074 | 165 | 324 | 11 | 335 |

2.3 – Teaching - Learning Process

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

| Number of Teachers on Roll | Number of teachers using ICT (LMS, e-Resources) | ICT Tools and resources available | Number of ICT enabled Classrooms | Numberof smart classrooms | E-resources and techniques used |
|----------------------------|---|-----------------------------------|----------------------------------|---------------------------|---------------------------------|
| 335 | 335 | 218 | 104 | 104 | 69530 |

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

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

There are Mentors who are in charge for every 15 to 20 students and there are Mentors who are in charge of student clubs. Every section has a Mentor who is in charge of the students of that Class. The Mentors are provided access to the profile of the students and also to their contact details. Well-trained teachers who know the background of the students are made responsible. Generally, the Mentors provide encouragement, motivation and counselling support. Where the student requires additional help which is beyond the abilities of the Mentor, s/he guides the students to the right person. Mentors help greatly in identifying diversity in terms of learning challenges as well. They provide firsthand support to the students with difficulties and gives relevant inputs to subject teachers to help the subject teachers be more effective in handling these students. The Class Mentor's contact details are shared with the parents/guardians. Similarly, the Mentor has the contact details of the parents/guardian. The Mentors also provide additional support in terms of providing career guidance. When students graduate and seek higher studies, almost always the students approach the Mentors for providing them with references. Many Mentors also encourage students to collaborate with them in projects or in academic writing, especially when students share their academic interests. This, although less common, greatly helps the students in giving them an edge over their competitors elsewhere. Such Mentors also guide these students during their projects and internships. This is of immense benefit to the students involved. Mentors who are in charge of student clubs generally work with students who share common curricular or extracurricular interests. Such Mentors are usually experts in a field and are passionate about the domains of their clubs. Their passion being contagious, students who are part of such clubs greatly thrive and excel in those domains. All Mentors have direct access to the Principal. Mentors are authorized to report any challenge immediately and seek resources required. Mentors also maintain record about student progression. The Mentorship program at College is where many teacher-student bonds for a lifetime gets developed. These mentors play the role of a caring adult and offer themselves as role models. Especially in the context of students who come from broken or conflicted families, the significance of the role played by these teachers, going way beyond what is their routine job as teachers, cannot be overstated.

| Number of students enrolled in the institution | Number of fulltime teachers | Mentor : Mentee Ratio |
|--|-----------------------------|-----------------------|
| 4239 | 335 | 1:13 |

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

| No. of sanctioned positions | No. of filled positions | Vacant positions | Positions filled during the current year | No. of faculty with Ph.D |
|-----------------------------|-------------------------|------------------|--|--------------------------|
| 335 | 335 | Nil | 52 | 74 |

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

| Year of Award | Name of full time teachers receiving awards from state level, national level, international level | Designation | Name of the award, fellowship, received from Government or recognized bodies |
|---------------|---|-------------|--|
| 2018 | Dr. S. Sudhakara Reddy | Principal | IUCEE- Leadership Award |
| 2018 | Dr. G. Charles Babu | Professor | Research Excellence and Academic Award |

[View File](#)

2.5 – Evaluation Process and Reforms

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

| Programme Name | Programme Code | Semester/ year | Last date of the last semester-end/ year-end examination | Date of declaration of results of semester-end/ year- end examination |
|---------------------------|----------------|----------------|--|---|
| BTech | MECH-03 | I/I | 19/12/2018 | 12/02/2019 |
| BTech | CIVIL-01 | I/I | 19/12/2018 | 12/02/2019 |
| BTech | CSE-05 | I/II | 13/05/2019 | 20/05/2019 |
| BTech | EEE-02 | II/I | 14/12/2018 | 12/01/2019 |
| BTech | ECE-04 | II/II | 20/05/2019 | 21/06/2019 |
| BTech | MINING-25 | III/I | 15/12/2018 | 12/01/2019 |
| BTech | CSE-05 | III/I | 15/05/2019 | 21/06/2019 |
| BTech | CIVIL-01 | IV/I | 12/12/2018 | 12/01/2019 |
| BTech | MECH-03 | IV/II | 22/04/2019 | 03/05/2019 |
| View File | | | | |

2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

| Number of complaints or grievances about evaluation | Total number of students appeared in the examination | Percentage |
|---|--|------------|
| 588 | 8478 | 6.94 |

2.6 – Student Performance and Learning Outcomes

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

<http://www.mrec.ac.in/COPO/2.6.1%20AY%202018-19.pdf>

2.6.2 – Pass percentage of students

| Programme Code | Programme Name | Programme Specialization | Number of students appeared in the final year examination | Number of students passed in final year examination | Pass Percentage |
|---------------------------|----------------|--------------------------|---|---|-----------------|
| 21 | Mtech | TE | 6 | 4 | 67 |
| 7 | Mtech | EPS | 11 | 9 | 82 |
| 20 | Mtech | SE | 23 | 23 | 100 |
| E00 | MBA | MBA | 49 | 45 | 92 |
| 25 | BTech | MINING | 56 | 54 | 96 |
| 5 | BTech | CSE | 228 | 222 | 97 |
| 4 | BTech | ECE | 201 | 190 | 95 |
| 3 | BTech | ME | 251 | 243 | 97 |
| 2 | BTech | EEE | 71 | 64 | 90 |
| 01 | BTech | CIVIL | 185 | 173 | 94 |
| View File | | | | | |

2.7 – Student Satisfaction Survey

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

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Promotion of Research and Facilities

3.1.1 – The institution provides seed money to its teachers for research

| |
|--|
| Yes |
| Name of the teacher getting seed money |
| Dr. K. Shimola |
| View File |

3.1.2 – Teachers awarded National/International fellowship for advanced studies/ research during the year

| Type | Name of the teacher awarded the fellowship | Name of the award | Date of award | Awarding agency |
|---------------------------|--|-------------------|---------------|---|
| National | Dr. Shashi Kanth Verma | PDF | 15/04/2019 | Institute of Plasma Research, Ahmedabad |
| View File | | | | |

3.2 – Resource Mobilization for Research

3.2.1 – Research funds sanctioned and received from various agencies, industry and other organisations

| Nature of the Project | Duration | Name of the funding agency | Total grant sanctioned | Amount received during the year |
|---------------------------|----------|----------------------------|------------------------|---------------------------------|
| Any Other (Specify) | 730 | AICTE | 12.71 | 10.16 |
| Any Other (Specify) | 6 | AICTE | 3.9 | 3.9 |
| Any Other (Specify) | 6 | AICTE | 2.92 | 2.92 |
| Any Other (Specify) | 6 | AICTE | 2.73 | 2.73 |
| View File | | | | |

3.2.2 – Number of ongoing research projects per teacher funded by government and non-government agencies during the years

| |
|------|
| 0.01 |
|------|

3.3 – Innovation Ecosystem

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

| Title of workshop/seminar | Name of the Dept. | Date |
|--|-------------------|------------|
| Guest Lecture on Light Weight Concrete | Civil Engineering | 01/08/2019 |

| | | |
|---|--|------------|
| FDP on Recent Advances in Structural Engineering | Civil Engineering | 02/11/2018 |
| Seminar on Skill development in civil engineering | Civil Engineering | 03/03/2019 |
| Seminar on Entrepreneurship | Civil Engineering | 02/03/2019 |
| FDP on Applications of Latest civil Engineering softwares | Civil Engineering | 21/01/2019 |
| Seminar on Entrepreneurship Skill Development | Electrical and Electronics Engineering | 26/07/2018 |
| Seminar on Startup Entrepreneurship Interaction | Electrical and Electronics Engineering | 22/08/2018 |
| Seminar on Be an Entrepreneur | Electrical and Electronics Engineering | 20/09/2018 |
| Workshop on Incubation and Patents | Electrical and Electronics Engineering | 28/12/2018 |
| Seminar on Patent Filing Process | Electrical and Electronics Engineering | 24/01/2019 |
| View File | | |

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

| Title of the innovation | Name of Awardee | Awarding Agency | Date of award | Category |
|---|-----------------|--|---------------|--------------------|
| Transforming Communities: Empowering Lives | C. Rachana | Indo Universal Collaboration for Engineering Education | 06/01/2019 | IUCEE-SCALE |
| Robo Soccer | K. Tejesh Goud | Marri Laxman Reddy Institute of Technology and Management, Hyderabad | 24/02/2019 | Technical Event |
| A Study on the Effect of Process Parameter Variation in TIG Welding | Usha Ayyagari | Sphoorty Engineering College, Hyderabad | 04/04/2019 | Paper Presentation |
| View File | | | | |

3.3.3 – No. of Incubation centre created, start-ups incubated on campus during the year

| Incubation Center | Name | Sponsored By | Name of the Start-up | Nature of Start-up | Date of Commencement |
|---------------------------|------|--------------|----------------------|--------------------|----------------------|
| Nil | Nil | Nil | Nil | Nil | Nil |
| View File | | | | | |

3.4 – Research Publications and Awards

3.4.1 – Ph. Ds awarded during the year

| Name of the Department | Number of PhD's Awarded |
|---|-------------------------|
| Electronics and Communication Engineering | 1 |
| Mechanical Engineering | 3 |
| Computer Science and Engineering | 1 |

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

| Type | Department | Number of Publication | Average Impact Factor (if any) |
|---------------|--|-----------------------|--------------------------------|
| International | CIVIL ENGINEERING | 43 | 1 |
| International | ELECTRICAL AND ELECTRONICS ENGINEERING | 42 | 1 |
| International | MECHANICAL ENGINEERING | 58 | 1 |
| International | ELECTRONICS AND COMMUNICATIONS ENGINEERING | 33 | 1 |
| International | COMPUTER SCIENCE AND ENGINEERING | 57 | 1 |
| International | INFORMATION TECHNOLOGY | 15 | 1 |
| International | MASTER OF BUSINESS ADMINISTRATION | 53 | 1 |
| International | Mining | 11 | 1 |

[View File](#)

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

| Department | Number of Publication |
|--|-----------------------|
| CSE | 2 |
| ECE | 2 |
| Civil | 1 |
| Humanities and Sciences | 4 |
| Electrical and Electronics Engineering | 11 |
| MBA | 50 |
| Mechanical | 1 |
| IT | 1 |
| HS | 3 |

[View File](#)

3.4.4 – Patents published/awarded during the year

| Patent Details | Patent status | Patent Number | Date of Award |
|----------------|---------------|---------------|---------------|
|----------------|---------------|---------------|---------------|

| | | | |
|----------------------------------|-----------|----------------|------------|
| AN EMPLOYEE MANAGEMENT SYSTEM | Published | 201841044752 A | 07/12/2018 |
| A HYDRATION TRACKER SYSTEM | Published | 201841044346 A | 30/11/2018 |
| View File | | | |

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

| Title of the Paper | Name of Author | Title of journal | Year of publication | Citation Index | Institutional affiliation as mentioned in the publication | Number of citations excluding self citation |
|--|---|--------------------------|---------------------|----------------|---|---|
| Experimental investigation of the combustion characteristics of Mahua oil biodiesel-diesel blend using a DI diesel engine modified with EGR and nozzle hole orifice diameter | Kumar M.V., Babu A.V., Kumar P.R., Reddy S.S. | Biofuel Research Journal | 2018 | 23 | Malla Reddy Engineering College | 23 |
| View File | | | | | | |

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

| Title of the Paper | Name of Author | Title of journal | Year of publication | h-index | Number of citations excluding self citation | Institutional affiliation as mentioned in the publication |
|--|---|--------------------------|---------------------|---------|---|---|
| Experimental investigation of the combustion characteristics of Mahua oil biodiesel-diesel blend using a DI diesel engine modified with EGR and nozzle | Kumar M.V., Babu A.V., Kumar P.R., Reddy S.S. | Biofuel Research Journal | 2018 | 2 | 23 | Malla Reddy Engineering College |

hole
orifice
diameter

[View File](#)

3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

| Number of Faculty | International | National | State | Local |
|-----------------------------|---------------|----------|-------|-------|
| Attended/Seminars/Workshops | Nill | 35 | 10 | 20 |
| Presented papers | 12 | 53 | Nill | Nill |
| Resource persons | Nill | 8 | 15 | 25 |
| No file uploaded. | | | | |

3.5 – Consultancy

3.5.1 – Revenue generated from Consultancy during the year

| Name of the Consultan(s) department | Name of consultancy project | Consulting/Sponsoring Agency | Revenue generated (amount in rupees) |
|--|--|--|--------------------------------------|
| Civil Engineering | Standard penetration test and mix design | KNR Constructions PVT LTD | 200000 |
| Civil Engineering | Soil Testing | EE Engineering Consultancy Services | 100000 |
| Civil Engineering | Total Station Survey | Amrutha Projects | 120000 |
| Civil Engineering | Standard penetration test and mix design | Opus Developers | 100000 |
| Civil Engineering | Planning, Design, Execution monitoring and construction drawings | G. Kusuma Sree (G3 Residential Building) | 1000000 |
| Electrical Electronics Engineering | Lightning Arrester Design Earthing | Xitik Techno Ltd | 150000 |
| Mechanical Engineering | Design of end effector for harvesting robot | Pantech Prolabs India Pvt Ltd. | 50000 |
| Mechanical Engineering | Solar energy based submersible pump | SRRI Kandan Engineerings ANGU Pumps | 120000 |
| Master of Business Administration | Customer Survey | Phonix automobiles pvt. Ltd | 60000 |
| Electronics Communications Engineering | Medical image fusion using deep learning | Think IoT Solutions Pvt Ltd | 520000 |

convolution neural networks

[View File](#)

3.5.2 – Revenue generated from Corporate Training by the institution during the year

| Name of the Consultan(s) department | Title of the programme | Agency seeking / training | Revenue generated (amount in rupees) | Number of trainees |
|--|---------------------------------------|--|--------------------------------------|--------------------|
| Civil Engineering, MREC | Total Station | Isotech Infra Solutions | 55000 | 10 |
| Dr. Shashi Kant Verma, ME, MREC | Simulation of mixing species | Dhanush MEP | 35000 | 800 |
| Dr. B. L. Jaiswal, ME, MREC | Kinematics of Robotic Arm | SakRobotix Lab | 40000 | 6 |
| Dr. S Kannan Mr. A Venkatrami Reddy , IT, MREC | Hands on Training on Microsoft Office | Shalom Concept School, Bhadurpally, Hyderabad, Telangana 500043. | 5000 | 12 |
| Dr. M. Maheswari, EEE, MREC | Industry Electrical Safety | Xitik technoism, Hyderabad | 18000 | 5 |

[View File](#)

3.6 – Extension Activities

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

| Title of the activities | Organising unit/agency/ collaborating agency | Number of teachers participated in such activities | Number of students participated in such activities |
|----------------------------------|--|--|--|
| Swachh Bharat Summer Internships | Panchayats of adopted villages | 1 | 30 |
| International yoga day | NSS UNIT I II | 4 | 120 |
| PMGDISHA | TASK, Telangana | 1 | 45 |
| Telanganaku Haritha Haaram | Panchayats of adopted villages | 3 | 60 |
| Swachh pakhwada campaign | Panchayats of adopted villages | 3 | 50 |
| health awareness programme | Dr. Mohans | 5 | 230 |
| Massive Bucket immersion | NSS UNIT I II | 15 | 1200 |
| National Adventure camp | ABVIMAS, Himachal Pradesh | 1 | 2 |
| National Youth | NSS UNIT I II | 1 | 130 |

| | | | |
|-----------------------------------|------------------------------|---|-----|
| day | | | |
| Awareness campaign on road safety | Traffic Police, Petbasherbad | 7 | 300 |
| View File | | | |

3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

| Name of the activity | Award/Recognition | Awarding Bodies | Number of students Benefited |
|------------------------------|--------------------------------------|---------------------------------------|------------------------------|
| Awareness on CD and CM Works | Best Practices for Rural Development | Reliable Environmental Services (NGO) | 68 |
| View File | | | |

3.6.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

| Name of the scheme | Organising unit/Agency/collaborating agency | Name of the activity | Number of teachers participated in such activities | Number of students participated in such activities |
|------------------------------------|---|--|--|--|
| Rural Community Service | NSS Cell JNTUH, NIPRD | Work shop on Rural community engagement at JNTUH | 1 | 1 |
| SHE Team Awareness | SHE Team, Cybarabad | she teams awareness programme | 15 | 850 |
| Voters Awareness | NSS UNIT I II | New voter enrollment campaign | 7 | 700 |
| Awareness on Road Safety | Traffic Police, Petbasherbad | Awareness campaign on road safety | 7 | 300 |
| Environment Conservation Awareness | NSS UNIT I II | Massive Bucket immersion | 15 | 1200 |
| Rural Health Awareness | Dr. Mohans | health awareness programme | 5 | 230 |
| Swachh Bharat Mission | Panchayats of adopted villages | Swachh pakhwada campaign | 3 | 50 |
| Haritha Haram | Panchayats of adopted villages | Telanganaku Haritha Haaram | 3 | 60 |
| International Yoga Day | NSS UNIT I II | International Yoga Day | 4 | 120 |
| Swachh Bharat Mission | Panchayats of adopted villages | Swachh Bharat Summer Internships | 1 | 30 |
| View File | | | | |

3.7 – Collaborations

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

| Nature of activity | Participant | Source of financial support | Duration |
|---------------------------|-----------------------|-----------------------------|----------|
| PhD Research | Mr. Katla Rajender | Kakatiya University | 90 |
| PhD Research | Mr. K. Bharadwaja | K L University | 180 |
| PhD Research | Ms. Heruthunisa Shaik | JNTU Ananthpuram | 180 |
| Electrical Vehicle Design | Dr. M. Maheswari | Xitik technoism, Hyderabad | 180 |
| View File | | | |

3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

| Nature of linkage | Title of the linkage | Name of the partnering institution/ industry /research lab with contact details | Duration From | Duration To | Participant |
|---------------------------------|--|---|---------------|-------------|-------------|
| SSCL - MRCA Internship facility | SSCL - MRCA Internship facility | M/s. Singareni Collieries Company Limited | 01/05/2018 | 01/06/2018 | 135 |
| Faculty development program | Three Day FDP on "Analog IC Design using CADENCE Tool" | Entuple technologies pvt. ltd | 12/12/2018 | 14/12/2018 | 25 |
| Workshop | Two Day Workshop on "Development of Advanced Interface RTOS on ARM7" | Unistring technologies Pvt. Ltd. | 19/09/2018 | 20/09/2018 | 50 |
| Workshop | One Week Workshop on "VLSI Semi Custom Design" | Vedic school of VLSI design | 18/06/2018 | 23/06/2018 | 20 |
| Training | Collaborate through IBM Career Education program. a) Courseware and | IBM | 18/12/2018 | 17/12/2019 | 240 |

| | | | | | |
|---------------------------|---|--|------------|------------|----|
| | Training. b) Softwares - IBM Provide all relevant Software required for the training programs. | | | | |
| Training | To recognize RD in Mobile Development areas To excel man power in software development. | Netar Software services Pvt Limited | 18/10/2018 | 17/10/2019 | 40 |
| Internship | Material Characterisations and metal matrix composites | Aptar Pharma India Pvt Ltd Survey No 790, Kistapur, Village, Medchal, Hyderabad, Telangana 501401 Ph. 8106175034 | 25/05/2019 | 09/06/2019 | 16 |
| Training | Raspberry pi | Xitik technoism, Hyderabad | 17/09/2018 | 22/09/2018 | 48 |
| Training | Design and Development of All Terrain Vehicle | Fraternity of Mechanical and Automotive Engineers | 08/05/2019 | 26/05/2019 | 25 |
| Training | Design and Development of All Terrain Vehicle | Fraternity of Mechanical and Automotive Engineers | 08/05/2019 | 26/05/2019 | 50 |
| View File | | | | | |

3.7.3 – MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year

| Organisation | Date of MoU signed | Purpose/Activities | Number of students/teachers participated under MoUs |
|----------------------------|--------------------|----------------------------|---|
| Xitik technoism, Hyderabad | 21/07/2018 | Industry Electrical Safety | 48 |

| | | | |
|--------------------------------------|-----|-------------|----|
| Reliable Environmental Services | Nil | Internships | 65 |
| EE Engineering Construction Services | Nil | Internships | 52 |
| View File | | | |

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

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

| | |
|--|--|
| Budget allocated for infrastructure augmentation | Budget utilized for infrastructure development |
| 109.32 | 100.26 |

4.1.2 – Details of augmentation in infrastructure facilities during the year

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

4.2 – Library as a Learning Resource

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

| Name of the ILMS software | Nature of automation (fully or partially) | Version | Year of automation |
|---------------------------|---|---------|--------------------|
| KOHA software | Fully | 3.15 | 2008 |

4.2.2 – Library Services

| Library Service Type | Existing | | Newly Added | | Total | |
|----------------------|----------|----------|-------------|--------|-------|----------|
| | | | | | | |
| Text Books | 57662 | 12565389 | 749 | 317149 | 58411 | 12882538 |
| Reference Books | 3084 | 996492 | 143 | 33125 | 3227 | 1029617 |
| e-Books | 6916 | 199811 | 3302 | 13500 | 10218 | 213311 |
| Journals | 760 | 2075168 | 139 | 238434 | 899 | 2313602 |

| | | | | | | |
|------------------|-------|---------|-------|---------|-------|---------|
| e-Journals | 24135 | 3391400 | 10426 | 1091078 | 34561 | 4482478 |
| Digital Database | 1 | 56350 | 2 | 56350 | 3 | 112700 |
| CD & Video | 7600 | 50000 | 15251 | 25600 | 22851 | 75600 |
| Others(s pecify) | 3 | 74000 | 3 | 106720 | 6 | 180720 |

[View File](#)

4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

| Name of the Teacher | Name of the Module | Platform on which module is developed | Date of launching e-content |
|------------------------|--|---------------------------------------|-----------------------------|
| B. Vamsi Krishna | Forensic Engineering in Civil and Structural Engineering | LMS of MREC | 29/07/2018 |
| B. Vamsi Krishna | Design of Steel Structures, Wooden models for Effective learning | LMS of MREC | 04/11/2018 |
| K. Vamsi Krishna | Fluid Kinematics | LMS of MREC | 18/01/2019 |
| Dr. J. Selwyn Babu | Moment Distribution Method | LMS of MREC | 23/02/2019 |
| Dr. A. Raveendra | Abrasive Jet Machining | LMS of MREC | 04/10/2018 |
| Mrs. M. V. Varalakshmi | Dispalcement measurements | LMS of MREC | 06/12/2018 |
| Dr. Yogesh Madaria | Radiation Heat Transfer | LMS of MREC | 10/02/2019 |
| Mrs. I. Srideepthi | DH-Represntation | LMS of MREC | 15/03/2019 |
| Dr. G. Charles Babu | Data Pre-Processing and Aggregation | LMS of MREC | 28/07/2018 |
| Dr. RP Ram Kumar | Introduction to Java Script | LMS of MREC | 21/12/2018 |

[View File](#)

4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

| Type | Total Computers | Computer Lab | Internet | Browsing centers | Computer Centers | Office | Departments | Available Bandwidth (MBPS/GBPS) | Others |
|----------|-----------------|--------------|----------|------------------|------------------|--------|-------------|---------------------------------|--------|
| Existing | 1591 | 23 | 0 | 0 | 8 | 13 | 9 | 400 | 0 |

| | | | | | | | | | |
|-------|------|----|---|---|---|----|---|-----|---|
| Added | 280 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Total | 1871 | 25 | 0 | 0 | 8 | 15 | 9 | 400 | 0 |

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

| |
|----------------|
| 400 MBPS/ GBPS |
|----------------|

4.3.3 – Facility for e-content

| Name of the e-content development facility | Provide the link of the videos and media centre and recording facility |
|---|---|
| Study Materials | http://mrec.ac.in/Examinations/ExaminationsStudyMaterials |
| Question Banks | http://mrec.ac.in/Examinations/ExaminationsQuestionBanks |
| Previous Question Papers | http://mrec.ac.in/Examinations/ExaminationsQuestionPapers |
| Mrecacademics | http://mrecacademics.com/ |
| IEEE –ASPP Package (e-Journals) | www.ieeexplore.ieee.org |
| DELNET (Development Library Network) | www.delnet.in |
| Inflibnets N-LIST (e-Journals e-Books) | www.nlist.inflibnet.ac.in |
| DELNET E-Journal (Management) | http://164.100.247.25/basisbwdocs/manag.html |
| DELNET E-Journal (Computer Science) | http://164.100.247.25/basisbwdocs/computerscience.html |
| DELNET E-Journal (Education) | http://164.100.247.25/basisbwdocs/education_journal.htm |
| J-Gate (JET) (e-Journals e-Books) | www.jgateplus.com |
| J-Gate (JSMS) (e-Journal e-Books) | www.jgateplus.com |
| Springer (Mechanical) e- Journals | www.link.springer.com |
| Wiley Blackwell Civil Engineering (e-journals e-books) | www.onlinelibrary.wiley.com |
| Remotlog Authentication software | www.mrec.remotlog.com |

4.4 – Maintenance of Campus Infrastructure

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

| Assigned Budget on academic facilities | Expenditure incurred on maintenance of academic facilities | Assigned budget on physical facilities | Expenditure incurred on maintenance of physical facilities |
|--|--|--|--|
| 1832300 | 1764600 | 1236200 | 1176400 |

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

The institution has a permanent manager for the work, whether it adds or maintains existing constructions. The buildings are regularly maintained for maintenance and repairs. The buildings, corridors and other areas are cleaned and ordered regularly by the housekeeping team. The washing areas are regularly maintained by a team to keep them usable. The Ministries managed by their heads maintain their operational conditions with their laboratory equipment. Before the academic year began, the HODs were expected to spend the academic year on repairs and maintenance at all their laboratories. They identify agencies that will undertake maintenance work and get the equipment ready before each semester begins. An IT cell is operated by the institutions senior faculty member to supervise the purchase, repair and replacement of equipment including computers, printers, projectors and others around the institution in the field of information technology. The Institute shall budget for maintenance and use of campus infrastructure facilities under various headings. Adequate maintenance and repair funding was distributed by the Institute Planning Committee. Different supervisory committees such as the Purchasing Committee, the Maintenance and Repair Committee, the Sports Committee, the Library Committee, the Maintenance of the laboratory, Student Input Committee etc. are in charge of the funding allocation. To maintain and upkeep the infrastructure Institute facilities and equipments, following activities are undertaken by college:-

- There is Stock Maintenance Committee in every department, who maintains the stock register by physically verifying the items round the year.
- Department wise annual stock verification is done by concerned Head of the Department.
- Regular maintenance of Computer Laboratory equipments is done by Laboratory Assistant along with Laboratory attendant and they are headed by Lab Maintenance Committee Convenor.
- Overall development of campus is done by Campus Discipline and Cleanliness Committee of the college.
- Regular cleaning of water tanks, proper garbage disposal, pest control, landscaping and maintenance of lawns is done by Institute Fourth Class Employees.
- College campus maintenance is monitored through regular inspection.
- Upkeep all facilities and cleanliness of environment in men's and women's hostel is maintained through Hostel monitoring committee.
- Outsourcing is done for maintenance and repairing of IT infrastructure such as computers, internet facilities including Wi-Fi and broadband. Updating of softwares is done by lab assistants.
- Outsourcing is done for the maintenance of wooden, furniture, electrification, and plumbing.
- Regular maintenance of the water cooler and water purifier is done by outsourcing agent.
- The maintenance of the reading room and stock verification of library books is done regularly by library staff.

<http://mrec.ac.in/Infrastructure/InfrastructureOverview>

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

| | Name/Title of the scheme | Number of students | Amount in Rupees |
|--------------------------------------|--------------------------|--------------------|------------------|
| Financial Support from institution | Merit Scholarship | 81 | 162000 |
| Financial Support from Other Sources | | | |
| a) National | Telangana State E-Pass | 2267 | 104540800 |
| b) International | Nil | Nil | 0 |

[View File](#)

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

| Name of the capability enhancement scheme | Date of implementation | Number of students enrolled | Agencies involved |
|---|------------------------|-----------------------------|-------------------------|
| Personal Counselling Mentoring | 09/07/2018 | 6879 | Internal Faculty (MREC) |
| Yoga Meditation | 22/08/2018 | 1214 | Internal Faculty (MREC) |
| Bridge Courses | 17/07/2018 | 1261 | Internal Faculty (MREC) |
| Language Lab | 09/07/2018 | 1775 | Internal Faculty (MREC) |
| Remedial Classes | 22/08/2018 | 2205 | Internal Faculty (MREC) |
| Soft Skill Development | 25/06/2018 | 1135 | FACE Academy |
| View File | | | |

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

| Year | Name of the scheme | Number of benefited students for competitive examination | Number of benefited students by career counseling activities | Number of students who have passed in the comp. exam | Number of students placed |
|---------------------------|-----------------------------|--|--|--|---------------------------|
| 2018 | Placement Training | Nil | Nil | Nil | 633 |
| 2018 | Guidance and Counseling | Nil | 1240 | Nil | Nil |
| 2019 | GATE/GRE/IELTS/TOEFL/Others | Nil | Nil | 45 | Nil |
| View File | | | | | |

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

| Total grievances received | Number of grievances redressed | Avg. number of days for grievance redressal |
|---------------------------|--------------------------------|---|
| 3 | 3 | 7 |

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

| On campus | | | Off campus | | |
|-------------------------------|---------------------------------|---------------------------|-------------------------------|---------------------------------|---------------------------|
| Name of organizations visited | Number of students participated | Number of students placed | Name of organizations visited | Number of students participated | Number of students placed |
| 50 | 712 | 633 | Nil | Nil | Nil |

[View File](#)

5.2.2 – Student progression to higher education in percentage during the year

| Year | Number of students enrolling into higher education | Programme graduated from | Depratment graduated from | Name of institution joined | Name of programme admitted to |
|------|--|--------------------------|---------------------------|----------------------------|-------------------------------|
|------|--|--------------------------|---------------------------|----------------------------|-------------------------------|

No Data Entered/Not Applicable !!!

[View File](#)

5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

| Items | Number of students selected/ qualifying |
|------------------|---|
| GATE | 10 |
| GRE | 3 |
| TOFEL | 1 |
| Any Other | 16 |

[View File](#)

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

| Activity | Level | Number of Participants |
|----------------------------|------------------------|------------------------|
| Cultural Activities | Institute Level | 35 |
| Sports | Institute Level | 55 |

[View File](#)

5.3 – Student Participation and Activities

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

| Year | Name of the award/medal | National/ Internaional | Number of awards for Sports | Number of awards for Cultural | Student ID number | Name of the student |
|-------------|-------------------------|------------------------|-----------------------------|-------------------------------|-------------------|---------------------|
| 2018 | WINNER | National | 1 | Nil | 17J41A04D0 | PRASHANTH |

[View File](#)

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

The institute believes that the growth of college is possible with active involvement of all the stakeholders including the students, the staff, the faculty and the management. For that, the college has established various student councils. The institute has the best practice of choosing the student representatives from each class and recommending them to the range of student council committees. These committees consist of students and faculty members in various academic and administration bodies such as technical, cultural, social, Sports, NSS and other committees based on the students' interest. Every committee has its own executive body with the faculty and student representatives which functions or operates under the dynamic leadership of faculty members as the faculty advisor. The student representatives circulate the information from college administration and other committees to all the students. The student council committee members are assigned different roles in academic and administrative bodies for the smooth conduct of all the events or

activities in the campus. The aim of these committees is to ensure the continuous range of campus activities in the particular course of an academic year. The council is responsible for conducting of many events and activities throughout the year in the campus such as curricular, co-curricular and extracurricular activities where the students assist the teachers in arranging, organizing and executing different students centered activities. The student representatives act as facilitators between students and faculty for exchange of their views and opinions. These committees ensure that the maximum active involvement and engagement of the students and faculty members in various events and activities conducted by the institution. The activities of the council are supported by the participation of all the faculty members. The student associations organize several activities and events in the college premise such as technical, non-technical fests, workshops, conferences, guest lectures, celebrating special days and conducting various competitions for the students by the students. The student council members actively take part in various extension activities such as Swachh Bharat Abhiyan, Tree plantation, Yoga Day, Blood Donation Camps, celebrating Engineers' Day, Mehendi and Rangoli Competitions and so on so forth. The student representatives in different committees perform various functions such as organizing sports day and cultural events. The college also provides students an opportunity to interact with the industry experts and learn the latest advancements in research and in their specializations. It also addresses the problems of students in the campus, and the same can be communicated to the principal. Other responsibilities of these councils are for maintaining proper discipline in the campus and making the college campus clean and green. Working in various committees, the students get an opportunity to interact with faculty members, the staff, the principal and the management. Therefore, this exposure helps students to develop leadership skills, critical thinking and management skills through active involvement.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

(i) Yes the institution has an active registered Alumni association the registration is renewed every year. (ii) The members meet at least once in a year and discuss all the issues pertaining to the development of the institution both academically and otherwise. (iii) The alumni participation basically is in areas of identifying the gaps between the levels of learning within the campus and the levels of learning expected by the industry. (iv) The institution arranges lectures by alumni in different departments so that the students can be motivated to prepare themselves for careers in an environment of global competition. Malla Reddy Engineering College (Autonomous) has commenced its alumni association with few graduated students. It has governing body with President, Vice-president, Secretary, Treasurer and General Secretary and Executive body and they extend their interminable similarity with the foundation. New association is chosen once in every two years. The alumni association is dynamic in propelling affiliations and family relationship among the graduated class, staff and the organization. Other than helping the graduated class in each and every believable ways, it in like manner credits its assistance to the school to achieve its regarded goals, its vision and mission. The organization adequately participates in all the activities coordinated by the alumni association. Our top alumnus are placed in various grand affiliations, most of them are delivering their obligations in different positions like Software Engineers, R D Engineers, NDT Engineers, System Engineers, Tech Support Engineers, Software Testers and other government affiliations. The alumni association outlines the moral, academic and mental impression of the understudies as they get different open entryways for partaking in patterns of getting, inspecting and exploring about the judicious

data. Alumni association gets-together are driven every year to help the current understudies for making care about various business openings that are accessible in this awful genuine world and the fundamental strategies to meet the necessities of genuine appraisals like GRE, TOFEL and other work arranged tests in open region. The association conducts guest lecturers, transitory position ventures, workshops and classes on various aptitudes to improve students data in particular and non-specific districts. It impels students to choose higher education in India and abroad. The alumni day is conducted every year in July. Students who have completed their B.Tech/M.Tech/MBA course can select the graduated class connection.

5.4.2 – No. of registered Alumni:

1098

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

103000

5.4.4 – Meetings/activities organized by Alumni Association :

i) Alumni day is usually conducted once in a year. The Alumni are invited for the same. (ii) Three alumni meetings will be conducted per year. (iii) Inviting alumni to give awareness programs.

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

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

Decentralization and Participative management: Institution practices Decentralization and Participative Management. The success of an institution is the result of the combined efforts of all who work towards attaining the vision of the institution. Right from the President of the Management Committee to the staff and students, all the stakeholders have a role to play in building of the college. Their involvement and cooperation in devising and implementing decision making policies for academic and administrative affairs through various bodies and committees have contributed to the growth of the college Institution focuses keen on decentralization by intending equal opportunity (equal role to participate is the functioning of the Institution management comprises of management committee, college governing council and each committee has been provided with specific functions cater to the needs of institution for the ongoing progress and development of the Institution. Management committee takes case of infrastructure facilities which fulfil the quality and the required needs of the higher education bodies to reach the set goals or bench-marks of the Institution. It also extends all the amenities for the teaching and nonteaching faculty and students. College Governing Council takes care of financial management and the implementation of facilities for the institution with the cries to upgrade the standard of amenities which supports effectively the teaching learning and research aspects. It guides and articulates the available resources and provides freehand to the head of the Institution to carry out the activities in order to reach the expected maximum standard in turn to motivate the teaching and non teaching faculty to work according to the goal set. Teacher guardian committee is available in college taking care of students from first year of student's admission. The Principal, Heads of the departments, teaching and non teaching faculty along with student union members, class student representatives together concentrate on fostering the progress of institution by sharing the responsibilities and participate growth of institution and to act according to the aims and objectives of the Institution. ii. The decentralized mechanism exists even at the department

levels. Institution focuses keen on decentralization by intending equal opportunity (equal role to participate is the functioning of the Institution management comprises of management committee, college governing council and each committee has been provided with specific functions cater to the needs of institution for the ongoing progress and development of the Institution. Management committee takes care of infrastructure facilities which fulfil the quality and the required needs of the higher education bodies to reach the set goals or bench -marks of the Institution. It also extends all the amenities for the teaching and nonteaching faculty and students. College Governing Council takes care of financial management and the implementation of facilities for the institution with the cries to upgrade the standard of amenities which supports effectively the teaching learning and research aspects. It guides and articulates the available resources and provides freehand to the head of the Institution to carry out the activities in order to reach the expected maximum standard in turn

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

Yes

6.2 – Strategy Development and Deployment

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

| Strategy Type | Details |
|--------------------------------------|--|
| Admission of Students | The admission process followed in the college is through two categories. Category-A (Convener quota): 70 of the seats are filled under UGPG UG: The admissions are based on the state-wide ranks obtained by students in EAMCET entrance exam. PG: Admissions into PG are based on the merit of candidates in GATE, PGCET and ICET. Category-B (Management/NRI quota): 30 of the seats are filled through Management/NRI quota. UG: Based on merit in EAMCET rank, Intermediate/Diploma marks. PG: The admissions are based on merit: the order of merit is GATE score, PGCET ranks for ME/M.Tech, ICET ranks for MBA MCA and the left over seats, if any are filled on the basis of UG marks. |
| Industry Interaction / Collaboration | Institute Interaction Cell has been formed. The Cell takes care of the following 1) Technical Talks/Invited seminars 2) Industrial visits/tours 3) Students' project works/internships MOUs (Memorandum of Understanding) with industries. The Malla Reddy Engineering College (Autonomous) facilitate exposure of industrial atmosphere to students through industrial visits. 1. Industry Institute Interaction Cell (IIIC) .The collaboration is focused on industrial training, curriculum development, technical workshops and experts. Innovation and Startups in collaboration with Industries .Signed |

MoU with Purdue University to implement EPICS (Engineering Projects in Community Services) Industry.

Human Resource Management

As a part of Quality Improvement programme, review and enhancement of HR policies and procedures of the institution has been completed and an updated and comprehensive HR framework would be in place before the beginning of the academic year.

Library, ICT and Physical Infrastructure / Instrumentation

1. There is an independent two floored building to accommodate the Library. 2. Each department has library committee to recommend books for procurement. 3. The latest editions of books and multiple copies of existing books are purchased. 4. Every department has a departmental library which is meant for staff and students of the department. 5. Library has a digital library facility having 60 systems open for students and staff. 6. It has collection of open source material. All International journals can be browsed using digital library. 7. Barcode is followed for issue of books and its availability. 8. Internet connectivity is available in every lab, faculty room, library and all other prominent locations. 9. All the laboratories of the departments have modern equipment meeting the academic syllabus and also research needs.

Research and Development

The Institute has established Research and Development Cell. All the activities pertaining to RD are monitored by RD Cell. Few faculty members have received projects from various bodies like UGC, ISTE, etc. The Institute encourages the faculty members to publish research papers in well reputed journals. The Institute gives cash rewards to faculty who publish papers in well reputed journals like Scopus Indexed, Web of Science, etc. The institute also encourages faculty to attend seminars, conferences, FDPs and Workshops

Examination and Evaluation

Being an Autonomous college Paper setting, valuation and selection of internal and external experts are done by the college Examination committee. Paper setters and examiners are selected from Universities and Other Autonomous colleges for better quality of examinations and evaluation. To

bring in confidentiality minimum four sets of question papers are kept ready for each subject and the one for the day is selected randomly just before examination. • Spot valuation is done at the college involving outside experts only. Once the tests are finalized, the marks of the student are uploaded in database with Bee's software. Security features are embedded on award documents like consolidated Mark Sheet and Provisional Certificate. The institute has changed student evaluation system from percentages to grading system.

Teaching and Learning

Good Teaching Learning Processes
Higher order learning is ensured through the use of e-learning platforms. Active learning methods (Project Based Learning, Based Learning, Experiential learning
Inclusion of ebooks, Course end Mini Projects Industrial visits
Collaborative Learning MOOC's, SWAYAM NPTEL Guest lecture by experts from industry to augment current learning experience Industry internships
Engineering Projects in Community Services National level and Institute level Hackathons to promote student innovative learning capabilities Skill Development Courses are introduced to make students ready to industry need

Curriculum Development

Curriculum development is done systematically in our Institute. Every department forms its own Board of Studies (BOS). BOS contains University nominee, Outside parent University nominee, Subject experts from reputed universities/Institutions, Industry experts and internal faculty. BOS is conducted twice in a year. AICTE Model Curriculum has been implemented with 160 credits. Curriculum is changed once in two years considering changes in technology and requirements of the industries. The Institute encourages the faculty to contribute to enrich the curriculum during course of its revision. After the completion of BOS, the recommendations are forwarded to the Academic Council for its approval

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

| E-governance area | Details |
|--------------------------|--|
| Planning and Development | E governance in various planning and development levels of the Institution |

is in place through the scheduling , conduct and maintenance of minutes of meetings and resolutions made out of Governing Council , Academic Council, Finance committee meetings for the policy making, approvals etc. Translation of these policies into action plans are thoroughly deliberated upon in IQAC meetings, Institute Academic Committee meetings , Research Advisory Board meetings etc.

Administration

This module provides support for day to day functionality of Institute Administration- Faculty induction, Leave management, service record maintenance, staff welfare measures etc. It has the features for creating holidays, Various Leaves, creating user and assign roles, reference data, service book, Pending Approvals, Employee's Shift, and Employee ID Card etc. It also defines workflow at various decentralized functionaries.

Finance and Accounts

The institution has been using competent software to maintain and manage the inflow and outflow of the finances. The accounting starting from the foundation entries till production of statement of accounts and financial reports required for strategic management, in particular strategic planning are being produced through usage of software

Student Admission and Support

This module makes admission process automated. E-Announcements for admissions are made through this module and E-Applications are invited through web portal for getting admission into various programmes offered by the institution. It generates the report on the seats allotment by convener and its status like sliding of branches etc. Out of the students applied for seats under B Category merit list is prepared and seats are allotted in the order of merit. Roll lists are also generated along with student profile creation.

Examination

Our Institute has adopted online transaction for the payment of examination fee. Once the fee is paid, the receipt is generated. Then the examination branch generates hall tickets for the students who have paid exam fee through online, Students can also apply for revaluation through online process only. The exam branch

uses 'BEES' software for online transactions and to complete the process of the system. The OMR sheets of theory and practical examinations are scanned by software and the marks are up loaded. The results are directly sent to the parents using the software.

6.3 – Faculty Empowerment Strategies

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

| Year | Name of Teacher | Name of conference/ workshop attended for which financial support provided | Name of the professional body for which membership fee is provided | Amount of support |
|------|----------------------------|---|--|-------------------|
| 2019 | Dr T.V Surendranatha Reddy | A Two day National seminar on Recent trends in English Language teaching and literature | Andhra Mahila saba Arts Campus, OU Hyderabad | 1000 |
| 2019 | Mr. B. Venkat Ramudu | IOT WITH RASPBERRY Pi | Dept of CSE ,MREC(A) | 1000 |
| 2019 | Mr. Md. Inayathulla | Emerging Technologies Workshop Network Programming Programmability with CISCO APIC-EM | Webcognize Pvt. Ltd. MREC (A) | 1000 |
| 2019 | Mr. R. Ravindra Reddy | Systems and Signal Processing | JNTUH, Hyderabad | 1000 |
| 2019 | Mr. K.Srinivasa Rao | DEVELOPMENTS IN ROBOTICS | ICR | 1000 |
| 2019 | Mrs. Y.Sudha | IUCEE International Engineering Educator Certificate | MREC | 1000 |
| 2019 | Mr. Ch. Narendra Kumar | Power System Engineering | JNTUH | 1000 |
| 2018 | Mrs K Usha Rani | National symposium on material in health care. | GITAM University, Hyd | 1000 |
| 2018 | Mr.T.Surendar Reddy | Advanced Embedded System Design on ZYNQ ULTRA Scale" using VIVADO | CoreEL technologies, Hyderabad | 1000 |

| | | | | |
|---------------------------|-------------------|-----------------------------|-----|------|
| 2018 | Dr A.Raveendra | DEVELOPMENTS IN ROBOTICS | ICR | 1000 |
| View File | | | | |

6.3.2 – Number of professional development / administrative training programmes organized by the Colleges for teaching and non teaching staff during the year

| Year | Title of the professional development programme organised for teaching staff | Title of the administrative training programme organised for non-teaching staff | From date | To Date | Number of participants (Teaching staff) | Number of participants (non-teaching staff) |
|------|--|---|------------|------------|---|---|
| 2018 | Seminar on "Road materials and testing" | Nil | 09/08/2018 | 09/08/2018 | 100 | Nil |
| 2018 | Role of Women as an Entrepreneur | Nil | 16/10/2018 | 16/10/2018 | 200 | Nil |
| 2018 | Advances in HVAC | Nil | 03/08/2018 | 04/08/2018 | 45 | Nil |
| 2018 | ANSYS and its Applications | Nil | 17/11/2018 | 24/11/2018 | 35 | Nil |
| 2019 | Two day workshop on Development of Advanced Interface and RTOS on ARM 7 | Nil | 22/01/2019 | 23/01/2019 | 23 | Nil |
| 2019 | Nil | Training on 3d printing | 01/04/2019 | 02/04/2019 | Nil | 15 |
| 2019 | IoT With RASPBERRY Pi | Nil | 24/06/2019 | 29/06/2019 | 38 | Nil |
| 2019 | Nil | Basic concepts of PSPICE and simulation | 11/04/2019 | 11/04/2019 | Nil | 31 |
| 2019 | Artificial Intelligence and Machine Learning in association with | Nil | 27/04/2019 | 28/04/2019 | 48 | Nil |

| | | | | | | |
|---------------------------|------------------------------|--|------------|------------|-----|---|
| | Bennett University, Noida | | | | | |
| 2018 | Nil | One Day Workshop on "Circuit Simulation using TINA Software" | 28/12/2018 | 28/12/2018 | Nil | 4 |
| View File | | | | | | |

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

| Title of the professional development programme | Number of teachers who attended | From Date | To date | Duration |
|---|---------------------------------|------------|------------|----------|
| Preparing for NBA Accreditation and SAR filling (2 Day National workshop) | 6 | 18/02/2019 | 19/02/2019 | 2 |
| Orientation Programme -1 | 3 | 20/08/2018 | 01/09/2018 | 13 |
| Recent Advances in Structural Engineering (1 week FDP) | 6 | 02/07/2018 | 07/07/2018 | 6 |
| Grand Challenges Scholar Program | 12 | 05/01/2019 | 05/01/2019 | 1 |
| Autodesk Revit Architecture (5 Day FDP) | 11 | 29/04/2019 | 03/05/2019 | 5 |
| IUCEE International Engineering Educator certification Program | 36 | 04/01/2019 | 08/01/2019 | 5 |
| DEVELOPMENTS IN ROBOTICS | 31 | 02/02/2019 | 04/02/2019 | 3 |
| INNOVATIONS IN CASTING | 22 | 10/04/2019 | 13/04/2019 | 4 |
| View File | | | | |

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

| Teaching | | Non-teaching | |
|----------|--|--------------|--|
| | | | |

| | | | |
|-----------|-----------|-----------|-----------|
| Permanent | Full Time | Permanent | Full Time |
| 52 | 52 | 5 | 5 |

6.3.5 – Welfare schemes for

| Teaching | Non-teaching | Students |
|---|---|--|
| Medical Health Insurance, Provident Fund, Subsidized Transportation and Free Transportation during beyond working hours, Subsidized Canteen Facilities. | Medical Health Insurance, Provident Fund, Free Transportation, Subsidized Canteen Facilities. | Subsidized Transportation and Free Transportation during beyond working hours, Gymnasium, Yoga with Meditation hall, Health Centre, Canteen Service with subsidized Rates, Aid for the Students, Participating in Events outside college. Annual Prize Distribution (Culture /Sports), Anti-ragging Cell, Central Placement Cell, Soft Skills Programme, Career Guidance Scheme, Youth Festivals, Mentoring Program, Campus Recruitment Training |

6.4 – Financial Management and Resource Mobilization

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

Financial audit is regularly done in the institute. It is done in two forms Internal and External audit. Internal audit is done by the faculty of the institute. A committee is formed in every department. These committees visit the other departments and thoroughly verify the files related to finance. After the verification is done, the report will be submitted to the authority. The external audit is done by parent university Jawaharlal Nehru Technological University Hyderabad (JNTU, Hyderabad) and the external company called MRK Reddy Co., Chartered Accountant. The company verifies all the files related to finance incurred for various purposes.

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

| Name of the non government funding agencies /individuals | Funds/ Grnats received in Rs. | Purpose |
|--|-------------------------------|----------------------|
| CMR Eucational Society | 803500 | Faculty Achievements |
| View File | | |

6.4.3 – Total corpus fund generated

| |
|---|
| 0 |
|---|

6.5 – Internal Quality Assurance System

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

| Audit Type | External | | Internal | |
|------------|----------|--------|----------|-----------|
| | Yes/No | Agency | Yes/No | Authority |
| Academic | Yes | JNTU | Yes | Internal |

| | | | | |
|----------------|-----|-------------------------------------|-----|---------------------------------|
| | | Hyderabad | | Quality Assurance Cell |
| Administrative | Yes | MRK Reddy Co., Chartered Accountant | Yes | Internal Quality Assurance Cell |

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

(1) Parents are regularly invited to Parent Teacher meetings to discuss the need /problem / progress of their wards (2) Feedback on regular basis (3) Student mentor details are provided to the parents to pursue their ward's performance

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

(1) Basic concepts of PSPICE and simulation (2) Training on lapping, honing and 3D printing (3) One Day Workshop on "Circuit Simulation using TINA Software" (4) Python Programming (5) Two days workshop on digital total station

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

(1) 5 UG Programs are NBA accredited. (2) Organized International Conference in collaboration with IUCEE. (3) Research and Developments activities improved.

6.5.5 – Internal Quality Assurance System Details

| | |
|--|-----|
| a) Submission of Data for AISHE portal | Yes |
| b) Participation in NIRF | Yes |
| c) ISO certification | Yes |
| d) NBA or any other quality audit | Yes |

6.5.6 – Number of Quality Initiatives undertaken during the year

| Year | Name of quality initiative by IQAC | Date of conducting IQAC | Duration From | Duration To | Number of participants |
|------|---|-------------------------|---------------|-------------|------------------------|
| 2018 | MREC 13th Graduation Day 2018 | 14/07/2018 | 14/07/2018 | 14/07/2018 | 869 |
| 2018 | MREC Orientation Day 2018 | 16/07/2018 | 16/07/2018 | 16/07/2018 | 1124 |
| 2018 | GOOGLE Mobile Developer Fest | 28/07/2018 | 28/07/2018 | 28/07/2018 | 236 |
| 2018 | Three Day Training Program on Auto CAD user level | 28/07/2018 | 28/07/2018 | 31/07/2018 | 42 |
| 2018 | Teachers Day Celebrations | 05/09/2018 | 05/09/2018 | 05/09/2018 | 89 |
| 2018 | Inauguration of Innovation | 22/09/2018 | 22/09/2018 | 22/09/2018 | 24 |

| | | | | | |
|---------------------------|--|------------|------------|------------|-----|
| | Startup Cell | | | | |
| 2018 | 2 Day Entrepreneurship Awareness Camp | 26/09/2018 | 26/09/2018 | 27/09/2018 | 114 |
| 2018 | Familiarization with features of IEEE Xplore Seminar | 01/11/2018 | 01/11/2018 | 01/11/2018 | 54 |
| 2019 | International Conference on Transformations in Engineering Education | 07/01/2019 | 07/01/2019 | 08/01/2019 | 448 |
| View File | | | | | |

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

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

| Title of the programme | Period from | Period To | Number of Participants | |
|---|-------------|------------|------------------------|------|
| | | | Female | Male |
| Health awareness programme | 16/08/2018 | 16/08/2018 | 150 | Nil |
| Bathukamma panduga - Local floral festival | 13/10/2018 | 13/10/2018 | 150 | Nil |
| Kaartheekavana bhojanaalu | 10/11/2018 | 10/11/2018 | 175 | 250 |
| Sankranthi samburalu - Local harvest festival | 11/01/2019 | 11/01/2019 | 350 | 450 |
| International Women's day | 08/03/2019 | 08/03/2019 | 800 | Nil |
| SHE Teams awareness programme | 15/03/2019 | 15/03/2019 | 800 | Nil |

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

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

United Nations adopted 17 Sustainable Development Goals to be achieved by the end of 2030, all across the globe under United Nations Development Programme (UNDP). These goals focus on the peace and prosperity of humanity. The seventh one among them is Affordable and clean energy. One means of achieving this particular goal is - renewable energy resource. There are variety of renewable

energy resources like wind energy, biomass energy, geothermal energy and solar energy etc. India being a tropical country has relatively longer duration of sunshine compared to the vast majority of the other countries. Therefore solar energy turns out to be the most reliable solution to achieve this affordable and clean energy goal. The institute plans to install solar power in a phased manner so as to completely exploit this eternal energy source for all its day to day power requirements. As a baby step, the institute powered all the street lights in the campus to Solar panels. In the coming years, the institute plans to expand Solar energy production in the campus and try to extract power sufficient to meet the 100 of the day to day requirements. In a parallel manner, the institute plans to use more number of energy efficient LED bulbs so that the power requirement too reduces.

7.1.3 – Differently abled (Divyangjan) friendliness

| Item facilities | Yes/No | Number of beneficiaries |
|-------------------------|--------|-------------------------|
| Physical facilities | Yes | Nil |
| Ramp/Rails | Yes | Nil |
| Rest Rooms | Yes | Nil |
| Scribes for examination | Yes | 5 |

7.1.4 – Inclusion and Situatedness

| Year | Number of initiatives to address locational advantages and disadvantages | Number of initiatives taken to engage with and contribute to local community | Date | Duration | Name of initiative | Issues addressed | Number of participating students and staff |
|------|--|--|------------|----------|----------------------------|---|--|
| 2018 | 1 | Nil | 22/06/2018 | 7 | PMGDISHA | Non teaching staff were trained on digital means of communication | 45 |
| 2018 | Nil | 1 | 14/07/2018 | 1 | Telanganaku Haritha Haaram | Tree plantation in the campus | 60 |
| 2018 | Nil | 1 | 01/08/2018 | 15 | Swacch pakwada campaign | Fortnight awareness programme on importance of Swacchathata (Cleanliness) | 50 |
| 2018 | Nil | 1 | 05/11/2018 | 10 | National | Part of NSS activ | 2 |

| | | | | | | | |
|---------------------------|-----|-----|------------|---|---|--|-----|
| | | | | | Adventure camp | ities | |
| 2019 | 1 | Nil | 12/01/2019 | 1 | National Youth day | Students were educated about Role of youth in nation building | 130 |
| 2019 | Nil | 1 | 02/02/2019 | 1 | New voter enrollment campaign | Awareness among the young voters | 700 |
| 2019 | Nil | 1 | 25/03/2019 | 1 | Workshop on Rural community engagement at JNTUH | Awareness on importance of rural community engagement | 1 |
| 2019 | Nil | 1 | 01/04/2019 | 1 | International youth exchange between India and Bangladesh | Social and cultural aspects were shared among the students of both the countries | 30 |
| View File | | | | | | | |

7.1.5 – Human Values and Professional Ethics

| Title | Date of publication | Follow up(max 100 words) |
|---|---------------------|---|
| Human values and professional ethics for the students | 25/06/2018 | Human values and Professional Ethics are taught to the students in different courses across the programme. They are taught in the form of tasks in English language laboratory. Also they are discussed in subjects like Environmental sciences and Gender sensitization. |

7.1.6 – Activities conducted for promotion of universal Values and Ethics

| Activity | Duration From | Duration To | Number of participants |
|----------|---------------|-------------|------------------------|
| | | | |

| | | | |
|-----------------------------------|------------|------------|------|
| Massive Bucket immersion | 15/09/2018 | 15/09/2018 | 1100 |
| Awareness campaign on road safety | 24/01/2019 | 24/01/2019 | 275 |
| World water day | 22/03/2019 | 22/03/2019 | 90 |
| International Day of Yoga | 21/06/2019 | 21/06/2019 | 120 |
| View File | | | |

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

old newspapers sent for recycling Refilling Toner cartridges Tree plantation
Switch off lights and fans when not used water sprinklers

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

RD Incentives-Inculcation of Research Culture among Faculty and Students A Research Committee constituted in the college functions with the following Goals:

- To inculcate the culture of research among faculty and student
- To identify the emerging and thrust areas of research and disseminate the information to staff and students
- To stimulate the faculty to initiate the work in the chosen area of interest and involve students in the project
- To motivate the faculty to present the findings in reputed journals / National / International Conferences and refine the on- going research work
- To stimulate the faculty and student to present/ publish the research papers in national / international conferences /reputed journals
- To encourage faculty use this opportunity to work towards a Ph.D. degree
- To give impetus and assistance to faculty to apply to funding agencies like AICTE, DST and DRDO for furthering their research work
- To kindle interest in students for active involvement in short duration and long duration projects.
- To uplift research work to the level of patenting
- To liaise with the management for procuring and establishing optimal infra-structure facilities required for research
- To identify thrust areas to know the individual research interest

The Context: Gone are the days when academicians can sit in ivory towers and look down upon lesser mortals. The current demand of the society is for the learned to come down to earth and return to the society what they have received in a more beneficial form. To whom is this demand valid for if not the Engineers! The repute of any educational institution rests on teaching - learning process and R D activities. R D as we all know refers to Research Development - Research therefore is the back bone for the development of the students, teachers and the Institution our college being conscious of this state of affairs, has been giving dynamic thrust towards developing and augmenting the research activities of the college to keep abreast of the advances in the fields of Engineering Technology. Inculcating research aptitude in faculty members and students has taken priority almost equal to the teaching-learning process. The competency of the students to face the challenges of the society at the end of their four-year tenure will be enhanced not just by their grades and ranks but the ability to apply their knowledge, analyse the problem, synthesize a solution and devaluate the outcome. These skills are developed by working on real time projects during their academic career. In order to direct the students along these lines, the faculty also have to be fully equipped in planning and guiding research. Just as much as the teaching learning process is a partnership between the teacher and the student, so also is the research and development process in which the guide and the researcher have equal role to play. The outcome of research should be relevant to the societal needs and a section of

the society at least should be direct beneficiaries. Therefore, taking up research activities shapes a person with moral responsibility and a value system that enhances his/ her commitment towards fulfilling the needs of the society. Thus the college wishes to show- case the RD activities of the college as on of the best practices. The Practice: The contextualization of the above is effected by the following practices: • Faculty pursuing Ph.D and with Ph. D. degrees are encouraged to attend and present papers in national and international conferences to get exposed to recent and emerging trends in their fields of interest. • To facilitate the same, the management extends financial assistance to the tune of 50 towards TA, DA and registration fee. On duty leave can be availed by the teachers for such participations. These provisions are also extended to students for participations in seminars/ symposia/ project contests etc. • Teachers with Ph.D. are given monthly financial allowance of ` 10000/ to help meet expenditure towards furthering their research work • Concession in weekly work load up to six hours is offered to faulty working on funded projects. • External experts from bodies like DST and DRDO are invited to address the faculty to give assistance in preparing a project report to be submitted for funding. • Seed money is provided to carry out work necessary preliminary work to enhance the probability of receiving funding • Eminent researchers are invited to campus for delivering lectures during National and International seminars/ workshops/ conferences organized by the various departments in the college to boost the knowledge level of the faculty and the students. • Faculty can apply to the management for travel, boarding and lodging allowances to visit reputed research laboratories and funding agencies like AICTE, DST and DRDO either to submit their proposals in person or follow up the submitted proposals. • As a part of the curriculum prescribed by the Mallareddy engineering college(A), The final students have to take up and complete project work. Turning this to the advantage of students, the nature of project work assigned to the students is of quality and sometimes a portion of the research work carried out by the faculty members. Such a practice lifts the level of the students to a higher platform of knowledge domain. • Winners in project contests are rewarded with equal prize money by the management during Annual College Day celebrations as recognition to the work of the student and as a motivation to the others to follow suit. • Memorandums of Understanding have been signed with many industries / agencies and such a practice plays a vital role in interaction of faculty and students with the industries and design projects in collaboration with them. • The idea of Interdisciplinary projects has been promulgated and this has caught on by the students and faculty. Evidence of Success: • A whopping amount of `50.52 lakhs has been disbursed by the Management as equal prize money for the faculty who have won prizes in project contests and proto type development in the last six years. • The above projects include interdisciplinary research work of IT and Mechanical faculty and CIVIL ECE faculty • Such a track record has reflected in the campus placement record of students. Problems Encountered and Resources Required: 1. Sustained motivation of students and faculty is always a challenge 2. Time constraint is a spoke in the wheel, in planning and execution of research specially during formative and summative assessment processes and when ad hoc responsibilities are assigned. 3. More generous seed money / advance from the management for preliminary work or while awaiting funds from agencies is always welcome. 4. Prompter reply from funding agencies will be encouraging. 5. If the funding agencies can point out the reason for rejecting the proposal or offer suggestions for improvement, it will go a long way in the development to faculty and hence the students. Serving community through NSS National Service Scheme (NSS) UNIT I II Aims and Objectives The NSS is part of our academic, social and personal life as it is the third dimension of education. It allows the students to actively contribute their services for the cause of community and the nation, thus helping them develop their personality. Service and attain the traits of a leader of the nation. As such,the NSS is the right platform,

where the student- youth of the nation may get to involve with real-life social activities, and thereby become responsible citizen of India. Motto of NSS- "NOT ME BUT YOU" This reflects the essence of democratic living and upholds the need for selfless service and appreciation of the other persons point of view and also to show consideration for fellow human beings. It underlines that the welfare of an individual is ultimately dependent on the welfare of society on the whole. Therefore it should be the aims of the NSS to demonstrate this motto in its day-to-day programmes. NSS SYMBOL The symbol for the NSS has been based on the giant Rath Wheel of the world famous Konark Sun Temple (The Black Pagoda) situated in Orissa, India. The wheel portrays the cycle of creation, preservation and release and signifies the movement in life across time and space, The symbol thus stands for continuity as well as change and implies the continuous striving of NSS for social change. It stands for continuity as well as change and implies the continuous striving of the NSS for social transformation and advancement. ABOUT THE NSS The National Service Scheme (NSS) had its birth on September 24, 1969, during the Gandhi centenary year. The scheme was first launched in 37 Universities comprising 40,000 students. The National Service Scheme (NSS) is an Indian government-sponsored public service program conducted by the Ministry of Youth Affairs and Sports of the Government of India. Popularly known as NSS, the scheme was launched in Gandhijis Centenary year in 1969. Aimed at developing students personality through community service, NSS is a voluntary association of young people in Colleges,

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

<http://mrec.ac.in/NAAC/Criterion7/BP%202018%20-%2019.pdf>

7.3 – Institutional Distinctiveness

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

The institute organised AICTE - ISTE sponsored 6 day Faculty Development Programme on Engineering Drawing from July 2, 2018 onwards. Around forty faculty members of various engineering colleges from across the country participated in the programme. Experts like Prof. V. V. Sastry, Prof. K. L. Narayana, Prof. T. K. K. Reddy etc are among the resource persons who enriched the knowledge of the participants on the chosen topics. The institute organised Mandatory induction programme recommended by AICTE for the first B. Tech. students. The students are exposed to various arts and crafts like paper art, clay art etc. Further personality development sessions are conducted during the induction programme. Renowned motivational speaker Mr. Gampa Nageswara Rao addressed the students on the issues related to personality development on July 26, 2018. Anti ragging and anti drug awareness programme is conducted on July 27, 2018 with the help of the police personnel from the local Pet basheerabad police station. The departments of Civil Engineering and Mechanical Engineering organised a two day international conference titled International Conference on Civil Engineering in Emerging Economies (ICEEEE2k18) and International Conference on Advances in Design, Materials, Manufacturing Energy Systems (ICADMMES2k18) respectively from Sep 15 - 16, 2018. Vishesh 2k18 - a student project expo is organised on the occasion of Engineers day on Sep 15, 2018. The institute organised a two day Entrepreneurship awareness programme in association with JNTUH Entrepreneurship Development Cell from Sep 27 - 28, 2018. Department of Mining organised a one day symposium on Opportunities for Entrepreneurs in mining minor minerals on Sep 29, 2018 in association with Mining Engineers Association of India, Hyderabad Chapter. A seminar is arranged by the department of MBA on Commodities and derivatives for the benefit of MBA students. Mr. Mallesh, the resource person on the occasion educated the students about the rules and regulations involved in dealing with commodities

and derivatives. The institute celebrated Manufacturing day on Oct 5, 2018. Mr. Satyanarayana, CEO SIM Technologies educated the participants regarding the impact of manufacturing industry on the GDP of the nation. He added that the industry is swiftly shifting towards additive manufacturing from the conventional manufacturing. The institutes bid to host ICTIEE 2019 is accepted by Indo Universal Collaboration for Engineering Education (IUCEE). This conference organised from Jan 7 - 8, 2019 accommodated paper presentation sessions, workshops on various tools, key note sessions, expert lectures and panel discussions. Around 40 - 50 international experts from different parts of the world like the USA, Austria, Australia etc actively participated in the conference. The conference could attract around 1500 faculty members as delegates. The institute is associated with the activities of IUCEE since 2016 - 17. The institute celebrated International Womens day on March 8, 2019. Deepika Chalasani, co-founder, Fit4life attended the celebration as chief guest. She motivated the girl students and the female faculty members assembled for the celebration with her inspiring words. A 10 day internship programme on Python is conducted from June 3, 2019 onwards for the benefit

Provide the weblink of the institution

<http://mrec.ac.in/NAAC/Criterion7/ID%20AY%202018-19.pdf>

8.Future Plans of Actions for Next Academic Year

i. To renew the autonomy granted by U.G.C. The institute was granted partial autonomy by the affiliating University, J.N.T.U.H., in the year 2011 - 12. Subsequently the institute was granted autonomy by the University Grants Commission (U.G.C.) in the year 2014 - 15 for a period of 6 years that is valid till 2019 - 20. The institute made best use of the autonomy conferred by the U.G.C. • During this period, the institute made transition to Choice Based Credit System (C.B.C.S.). • It also introduced few certification courses that helped the students improve their skills and knowledge. • It introduced few Mandatory courses and audit courses like Yoga. • Open electives like Green buildings, World literature etc could be introduced. • Also the institute could maintain confidentiality in question paper setting, paper valuation etc. • The institute could plan comfortably for the announcement of results so that the valuable academic time of the student is not wasted. Looking at the advantages of autonomy and based on the experience and expertise gained during the recent years, the institute plans to submit application to the U. G. C. in the next year, for the renewal of autonomy. ii. To apply for NAAC III cycle accreditation The institute was accredited by National Assessment and Accreditation Council (N.A.A.C.) in the year 2010, valid till the year 2015. It got A grade with a C.G.P.A. of 3.01. As the institute was N.A.A.C. accredited and the then eligible branches were accredited by N.B.A., the institute got eligibility for receiving Rs. Four crore fund under Technical Education Quality Improvement Programme (T.E.Q.I.P.- II) Sub component 1.1. The infrastructure and other facilities were upgraded using this fund. Looking at the quality parameters maintained by the institute, in academics, infrastructure and other aspects, the peer committee that visited the institute for the accreditation under N. A. A. C. - II cycle recommended A grade to the institute with a C.G.P.A. of 3.20. This II cycle accreditation is valid till June 2020. Therefore the institute plans to apply for the renewal of N.A.A.C. accreditation under III cycle, in the next academic year. iii. To renew accreditation awarded by N.B.A. for the UG branches The Undergraduate programmes of Civil Engineering and Computer Science Engineering got accredited by National Board of Accreditation, twice while those of Electrical and Electronics Engineering, Mechanical Engineering and Electronics and Communication Engineering got accredited three times so far. The validity of this N. B. A. accreditation is till June 2020. Therefore the institute plans to apply for the renewal of N.B.A. accreditation for all these five Undergraduate Programmes in the prescribed manner.

