MALLA REDDY ENGINEERING COLLEGE



(UGC Autonomous Institution, Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad). Accredited 2nd time by NAAC with 'A' Grade, Maisammaguda (H), Medchal-Malkajgiri District, Secunderabad, Telangana State – 500100, <u>www.mrec.ac.in</u>

Institutional Strategic Plan

The strategic plan is made by Malla Reddy Engineering College to fulfill the requirements of industry and society by providing quality education with well-established infrastructure which leads to students' progression towards technical and social excellence.

The institutional strategic plan comprising of different strategies for the institutional development has been prepared and made available by carrying out systematically strength, weakness, opportunities, challenges (SWOC analysis) of the institute as explained in the following paragraphs.

Strategic Plan was drafted for the period 2018 to 2023 for transforming MREC into a quality technical education institute at the global level

Long term Goals:

- To reach the status of Deemed to be University.
- To integrate the academics and R & D programs in collaboration with the reputed Universities and Industries.
- To be ranked at the top in the list of NIRF Technical Institutions in India.
- Despite having a guest house, need to establish faculty quarters within the campus.
- To get **Quacquarelli Symonds** (**QS**) International Ranking (Specializing in the analysis of higher education institutions around the world).

Short Term Goals:

- To strengthen the Centre of Excellence (CoE) in Engineering and Technology and to setup more Incubation Centers and Startups.
- To strengthen Institute/Industry/Alumni interaction to enable better placements and get increased number of internships.
- To get recognition as a Research centre by affiliating university.
- Participate in AICTE Margdarshan to upgrade the level of other institutions
- Faculty/Student exchange programs at the international level
- To improve "e-ATL" facilities to the students and faculty to access e-books and ejournals at any point of time, from any location.
- To implement Digital Evaluation in the examination system.

- To improve e-governance facilities.
- Implementation of Skill development training programmes to students from first year onwards
- To multiply the number of patents and publications.
- To start new UG/PG Programs in emerging areas/technologies, thus improving the potential of employability among the students.
- To embrace innovative teaching methodologies to optimize the Teaching-Learning process through academic and administration reforms leading to improved learning outcomes among the students.

The Director, Principal, Deans, all HoDs and Stake holders of the Institute had several interactions, discussed extensively and arrived at the tentative institutional level SWOC analysis. This institutional level SWOC analysis has been reviewed in conjunction with the department level SWOC analyses to arrive at a consolidated institute-level analysis. This was again discussed with all the faculty and staff to finalize the Strengths, Weaknesses, Opportunities and Challenges of the institution as detailed below:

Procedure adopted for conducting the SWOC analysis and participation of the Stakeholders:

1. SWOC analysis was carried out by involving all stakeholders such as management, faculty, supporting staff, students, parents, alumni and representatives of employers. For this there were group consultations and discussions.

2. Meetings and consultation were conducted with the HODs and senior faculty. Each department submitted data on strengthening the following institutional infrastructure, laboratories, workshops, library and connectivity. Inputs were also received on new PG programs particularly in emerging areas training for the faculty and additional software's that could be procured.

3. Adequate emphasis has been given to faculty development. Faculty/non-teaching staff provided their respective Training Needs Analysis.

4. Assessments were made on the additional academic inputs to be provided to the students hailing from weaker sections of the society such as SC/ST/OBC.

5. At the departmental level, departmental faculty, technical staff and students discussed their respective SWOC analysis.

6. Departments submitted their departmental development plans to the Principal's office.

Principal's office has consolidated the SWOC and the action plan received from the departments.

8. The entire developmental plan in totality was discussed with HODs /senior faculty. Their inputs and suggestions were considered.

9. The development plan was placed before the BOG for consideration and approval.

While carrying out the SWOC analysis the following factors were considered:

- Existing Infrastructure of the institute which includes buildings, laboratories, equipment, workshops, library, connectivity, transport, furniture, hostels, medical facilities, play grounds, canteen, availability of Bank and Post office facilities etc.
- Fee structure, admission policies of the government including reservations, requirements of the affiliating university JNTUH / AICTE / UGC.
- Outcome based Curriculum Development and teaching & learning processes.
- Additional academic support for weaker students to improve their performance in the examination.
- Employability rate.
- Training Needs of Faculty/Technical Staff/Supporting Staff.
- Research, consultancy and IPR.
- Industry Institute Interaction.

After several brain storming sessions, the strengths, weaknesses, opportunities and challenges were identified:

Strengths, Weaknesses, Opportunities and Challenges (SWOC)

Strengths:

- The institute has visionary and enterprising management committed to creating a quality educational and research environment.
- The institute has 375 committed and competent faculty
- 31.7% doctorates among the faculty.
- Well established credit-based curriculum and a very credible examination system
- Well-designed curriculum tuned to industry and corporate needs
- MREC boasts of 8 wings in the Centre of Excellence which provides opportunities for an in-depth understanding of the most relevant industry technologies and make the students industry-ready
- Skill development training programmes offered to students from first year onwards
- Entrepreneurship Development Cell that grooms a spirit of self-reliance and entrepreneurship among the students
- 100% ICT enabled classrooms
- Student-centric approaches and initiatives which cater to both slow and quick learners

- Digital Evaluation in the examination system
- Industry Linkage for curriculum development, training and placement
- Student Association Council for furthering the cause of the student body and helping them work in coordination with the faculty and management
- Well-established library with adequate books and Journals conforming to AICTE/UGC requirements
- A dedicated "e-ATL" facility helps the students and faculty to access the e-books and ejournals at any point of time, from any location
- Dedicated training and placement cell (more than 910 job offers secured in the academic year 2020-21 till date)
- O-PITBLAST software, worth Rs.1.33 Crore is sponsored by O-PITBLAST University, Poland and STRAYOS software, Sponsored by AirZaar, Inc, New York, USA for Mining Engineering department, under international MoU Program.
- The college has been working closely with 18 professional societies.
- International standard cricket stadium, sports, and Gym facilities.
- Dedicated Career Guidance and Counseling Cell for the benefit of students for higher studies, overseas education, and placements.
- Industry Institution Interaction Cell (IIIC) for the benefit of students and faculty.
- Banking and ATM facilities inside the campus.
- Health care facilities with free medical check-ups and Ambulance.
- Eco-friendly campus, Separate hostels for Boys and Girls and In-house canteen facility.
- Solar Power generation for a sustainable environment.
- RO water system.
- E-Surveillance system with 24 X 7 Security.
- E-Governance through BeeS software and MRECACADEMICS.
- Major and Mini Auditorium with a capacity of 2000 and 300 seats respectively.
- NPTEL/SWAYAM local chapter.

Weaknesses:

- Despite taking up quality research work, there is a need to improve collaborative research.
- Though it has an excelling research ecosystem, there is a scope for recognition as a Research centre by affiliating university.
- Faculty/Student exchange programs at the international level.
- Despite having a guest house, need to establish faculty quarters within the campus.

Opportunities

- Skill development for students to make them competitive in the current job environment
- Provide more challenging and innovative research opportunities
- Address socio-economic needs for the underprivileged sections of the society and offer programs that assist their educational growth
- Participate in AICTE Margdarshan to upgrade the level of other institutions.
- Offering courses through SWAYAM to students and faculty members
- Scope to identify possible ways to extend the research to IPR as well as Incubations.
- Establish stronger relationships with R&D organizations
- Strengthening interaction with Alumni to facilitate better connectivity with the industry.
- Offering professional degree programmes in frontier areas
- Institute has scope to find a place in NIRF ranking
- Opportunity to maximize the potential of Centre of Excellence

Challenges:

- Emerging local and regional private colleges
- Government of India's New Education Policy (NEP), 2020 which paves the way for foreign universities to set up campuses in India.
- The fast pace of developments in technology and online courses
- Increasing importance given to the quantity of research paper publication diluting the quality of research and that of teaching.
- Lack of interest among bright engineers to pursue research/teaching as a career.
- The fluctuating trend in the global economy leads to a decrease in placement opportunities.
- Faculty with Ph.D. qualification in emerging areas.

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