



SELF STUDY REPORT
FOR
3rd CYCLE OF ACCREDITATION

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

**MALLA REDDY ENGINEERING COLLEGE MAISAMMAGUDA - VILLAGE VIA- KOMPALLY MEDCHAL-MALKAJGIRI
500100**

www.mrec.ac.in

Submitted To
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
BANGALORE

(Draft)

Executive Summary

Introduction:

Malla Reddy Engineering College (MREC) is a pre-eminent educational institution founded and promoted by Sri. Ch. Malla Reddy, an exemplary educationalist. MREC runs under the CMR Educational Society, which has been at the forefront of providing quality technical education in Hyderabad, Telangana State. MREC started in 2002, has had a meteoric rise, not just in reputation for quality education but also in increasing its student strength to 4,761 and a best-in-class faculty strength of 375.

MREC plays a much-needed pivotal role in educating and equipping students with technical and soft skills required to succeed in the current environment of rapid technological innovation and globalization. MREC students have been absorbed into renowned multi-national companies and industries, both domestically and internationally, and have played myriad roles in contributing to the industry and society at large. MREC has been at the forefront of recognizing industry and corporate needs for human resource capital while assimilating the policies and programmes of Telangana State and Central government to turn out graduates who can excel on the cutting edge of innovation and disruption.

Affiliations and Academic Credentials:

MREC is affiliated to Jawaharlal Nehru Technological University Hyderabad (JNTUH), Hyderabad and conferred autonomous status by JNUTH in 2011, UGC in 2014-2020 and 2020-2025. MREC has 11 academic programmes in UG and 7 programmes in PG which is serving the needs of the student body for the last 19 years.

Vision:

To be a premier center of professional education and research, offering quality programs in a socio-economic and ethical ambience.

Mission:

- To impart knowledge of advanced technologies using state-of-the-art infrastructural facilities.
- To inculcate innovation and best practices in education, training, and research.
- To meet changing socio-economic needs in an ethical ambience.

SWOC

Institutional Strength :

- The institute has a visionary and enterprising management committed to creating quality educational and research environment.
- The institute has about 375 committed, competent faculty recruited through a stringent recruitment process.
- 31.7% doctorates among the faculty.
- Well established credit-based curriculum and a very credible examination system
- World-class infrastructure tuned to industry and corporate needs
- MREC boasts of 8 Centers of Excellence which provide opportunities for 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 centered 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 (SAC) 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
- Dedicated “e-ATL” facility helps the students and faculty to access the e-books and e-journals at any point of time, from any location
- Dedicated training and placement cell (more than 759+ job offers secured in the academic year 2021-22 till date)
- Acquired O-PITBLAST software, worth Rs.1.33 Crore, sponsored by O-PITBLAST University, Poland and STRAYOS software, Sponsored by AirZaar, Inc, New York, USA for Mining Engineering department, under international MoU Program.
- College has been working closely with 18 professional societies.
- International standard cricket stadium, sports, and Gym facilities.

- Dedicated Career Guidance and Counselling Cell for the benefit of students for their 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 for students and faculties with free medical check-ups.
- Eco-friendly campus, Separate hostel for Boys and Girls and In-house canteen facility.
- Solar Power generation.
- RO water system.
- E-Surveillance system with 24 X 7 Security.
- E-Governance through BEES and MRECACADEICS.
- Major and Mini Auditorium with a capacity of 2000 and 300 seats.
- NPTEL/SWAYAM local chapter.

Institutional Weakness :

- Despite taking up quality research work, there is a need to improve collaborative research.
- Though it has an excellent 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.

Institutional Opportunity :

- 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

Institutional Challenge :

- Emerging local and regional private colleges
- The fast pace of developments in technology and online courses
- Increase in the importance attached to the number of research papers diluting the quality 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 and R&D.

Criteria wise Summary

Curricular Aspects :

- The institution has designed its curriculum with the National goal of empowering people through education. The institute offers a wide range of UG & PG programs contributing to the local, national, regional, and global needs of the country.
- The courses offered in the programmes are designed based on the current trends of National needs like Development of Appropriate Technology, Entrepreneurial and Skill Development.
- The Program Educational Objectives, Program Specific Outcomes, and Course Outcomes are designed in consonance with the graduate attributes of the Washington Accord and NBA/NAAC.
- In the Current Academic Year, the College offers 18 academic programmes, out of which 11 are UG and 7 are PG Programmes.
- The syllabus revision and introduction of new courses have been carried out in all the programmes offered by the institute.
- More than 90% of the courses have a focus on employability, skill development, and entrepreneurship. 485 new courses have been introduced during the last five years.
- The institute follows the Choice Based Credit System in all its academic programs.
- The students are given wide choice to choose electives, based on their aptitude, skill, and aspiration. The institute has introduced inclusive courses on human values & professional ethics, environmental science, and gender equality which are offered in various programs.
- Value-added courses are offered in various programmes, which impart multiskilling, experiential learning and employability for students. The course coordinator imparts knowledge by conducting brainstorming sessions during the course. Students register for these courses and on completion of the course, they are provided with a certificate.

- A total of 135 value-added courses have been conducted for the students in the last five years. Students undertake field projects and internships every academic year.
- The feedback received from the students and stakeholders are carefully analyzed, discussed and appropriate actions are initiated at various bodies including the Department Academic Committee and Governing Bodies.

Teaching-learning and Evaluation :

- The institution admits students on basis of rules & regulations of the State Government of Telangana. Seats are filled as per the reservation policy. 92.24% of seats are filled on an average over the last five years.
- The institution currently has 375 full-time teachers on rolls, follows 1:12.69 STR.
- The academic calendar is prepared and available online to learners. Sincere efforts are put to address the needs of advanced learners and slow learners. Bridge courses and remedial classes are provided to the students. Student-centric methods through experimental learning, participative learning, and problem-solving are practiced.
- Academic Calendar and Teaching-plans are strictly followed and are audited regularly.
- The institution has its own Learning Management System (www.mrecacademics.com) and a good reservoir of e-learning materials such as study materials (<https://mrec.ac.in/Examinations/ExaminationsStudyMaterials>) and lecture videos (<https://bit.ly/32WSVXP>).
- All faculty members and students effectively utilize the ICT-enabled classrooms.
- The excellent mentor-mentee system of MREC takes care of academic and related issues. For the latest completed academic year, the mentor-to-student ratio is 1:14.4.
- Currently, 119 faculty members are with Ph.D. qualifications and a good number of faculty members have experience of more than 15 years. Out of 375 full-time teachers, 125 are women.
- The institution has brought several IT integration and reforms in the examination system under the Examination Management System (EMS) services to integrate all the activities in the examination cell. Complete automation helps in the successful execution of examination processes. The system is fool-proof and transparent.
- Results are declared on an average of 19.8 days from the date of the last examination during the last five years.
- Students are educated on POs, PSOs and PEOs. The attainment of these is measured through continuous internal examination, end semester results, placement records and satisfaction survey summary of all the stakeholders and reviews the Teaching-Learning strategies
- For the latest completed academic year, 93.4% of students have graduated.
- The institution has the library with IEEE Periodicals Package, Springer Link, Wiley Blackwell, Elsevier Science Direct, McGraw-Hill Access Engineering, J-Gate, ASTM Digital Library, DELNET, Infilbnet's N-LIST Program, e-ATL and Knowledge Hub Engineering e-library (k-hub) to ensure access to e-resources.

Research, Innovations and Extension :

- Well defined policy for promotion of research and research ethics.
- Budgetary provisions for research in the financial plan.
- Funded by TEQIP II.
- Well-established research and development centre available to teachers and students for research and consultancy work.
- Seed money to promote innovative and inter-disciplinary research projects granted by the management every year.
- Promoting research activities and providing financial assistance for registration, TA, etc to participating faculty members.
- 119 Doctorates are currently working in the institute.
- 55 faculty were awarded fellowships for advanced studies and research.
- Received total grants worth Rs. **5,09,20,292/-** from various funding agencies.
- Healthy publishing volume of 2040+ research articles in prominent journals, books, book chapters and conferences which are indexed in SCI, SCOPUS, Web of Science.
- 300+ Paper published in Scopus/WoS/SCI-indexed journals.
- 2000+ citations in reputed journals.
- 204 workshops related to research, IPR and innovation activities are conducted.
- 54 Patents Filed/Published and 4 International patents Granted.
- Rs.135.105 lakhs generated through consultancy and testing services
- MREC Incubation-Hub encourages students with a special and entrepreneurial bent of mind.
- Entrepreneurship Development Cell (EDC) is established for promoting start-up culture among the students.
- Dedicated Women Entrepreneurship Development Cell (WEDC) is established for the benefit of girl students.
- MREC as a Member of the National Rural Entrepreneurship Mission has constituted Rural Entrepreneurship Development Cell in its campus.
- Institute carries out Social Responsibility (ISR) activities through NSS.
- 143 extension and outreach programs conducted.
- Unnat Bharat Abhiyan (UBA) unit is funded by the central government.
- 50+ awards and recognition received by the Institution for extension activities.
- 22,000+ students have participated in extension and outreach activities.
- 1000+ Collaborative activities per year for research, faculty exchange, student exchange, internship, on-the-job training and project work.
- 57 National and International MoUs signed for the benefit of the students and faculty for their academic and career advancements.
- Representatives of industry collaborators on various committees.

Infrastructure and Learning Resources :

- College is located on a 10-acre campus with 34151.42 Sq. mts. built-up area and is conducting 11 undergraduate and 7 post-graduate programs.
- The college has state-of-the-art infrastructure, creating an environment for progressive learning and development with infrastructure facilities and 100 % of classrooms and seminar halls are ICT enabled.
- All the laboratories are well equipped and maintained.
- College has a well-built Centre of Excellence with Robotics Research Center, LabVIEW Academy, Centre for Additive Manufacturing, Creative Computing Center, Editing & Animation Studio, Green Mat Studio, Dubbing Room, Media Centre (Learning Management System).
- Advanced Infrastructure facilities like R& D Cell, Incubation Center, EDC, Overseas cell, Placement Cell, IIC are the unique features of the campus.
- Solar System, Bio-gas plant, Water Harvesting, Solid & Sewage Treatment Plant, Waste Management are some of the best practices in our campus to showcase as an Eco-friendly campus.
- MREC-Academics YouTube channel, Complete College Automation are our Academic Strengths.
- The institute has exclusive sports complex with Cricket Stadium, gymnasium, and yoga center which spreads over an area of 3500 sqm.
- The Knowledge Resource Center/Library of Malla Reddy Engineering College is the treasure house of information with 60094 volumes, 6979 titles with e-ATL facility for all students and Staff and having Subscription in all national access like Delnet, Digital Library, IEEE-ASPP, INFLIBNET, J-GATE, JORSTEM, NDLI Club, OPAC, and REMOTLOG Softwares.
- IT Facilities includes 500 Mbps Internet Bandwidth, **2.23:1** Student Computer ratio, Media center, recording rooms, Lecture capturing systems.
- The college has Malla Reddy Boys Hostel with 210 Rooms & Girls Hostel with 180 Rooms with all amenities. A full-time doctor is available who can take care of medical emergencies.
- The institute has a spacious canteen and separate sections for staff and students with 500 seating capacity and delicious food at subsidized rates.
- The college runs 35 buses on different routes.
- A Power backup with 3 Generators.
- 18 security staff around the campus and E-Surveillance (24 X 7) –CC Cameras cover the whole campus.
- The college provides an in-campus Bank facility and 24 hrs ATM services.

Student Support and Progression :

- The institute strives its best for the all-round development of students through Student Chapters of various professional societies like IGBC, ICI, IEI, MEAI, ICE, SESI, ASME, IETE, CSI, APSMS, NCSST, ISTE, ISNT, SAE, IEEE, IEEE Women in Engineering actively organize Technical & Cultural Fests, Social activities, and Co-curricular activities.
- Adequate representation is given for students in all academic/ administrative committees and students are involved in the decision-making process.
- More than 51% of the students avail scholarships & free ships from Government as well as the institution.
- Guidance for competitive examination, soft skills training, Mentoring, Remedial coaching, Bridge courses, finishing school, Yoga, and meditation classes are initiatives for students' all-around development.
- Add-on Certificate courses are offered to all the students to enhance their skills and capabilities.
- Grievance-Redressal-Committee and Anti-Ragging-Committee help the students to address the issues if there are any.
- The institution has a good placement record. On average 62 % of the students are placed. 11 % of the students opt for higher education in prestigious institutions. Students who are appearing for the competitive examinations are all qualified.
- Well-furnished Student Association Council (SAC) in a built-up area of 1000Sq.mt is established to encourage students in technical & cultural activities.
- Students are encouraged to participate in Intra and Inter Technical, Cultural and Sports competitions.
- 379 awards/medals are won by the students in sports/cultural activities at the national/international level in the last 5 Academic Years.
- 135 sports/cultural activities/competitions are organized in the institution over the last five years.
- Modern Gym facilities, Wi-Fi in academic area and hostels and 24X7 Library access.
- Publication of Department Newsletter, College Magazine, and Newsletter.
- Online student feedback is obtained for Institutional development.
- Students' progress is intimated to the parents.
- Coaching for competitive examinations in the evening hours.
- Overseas Education cell established in the campus.
- Alumni association meetings conducted and Alumni participate actively in BOS and share their knowledge and experience through guest lectures.
- IIC has been established.
- Centre of Excellence established to train the students in emerging Technology Courses.
- Industrial Visits are arranged to get industrial exposure.
- Students opt for internships during semester break.

Governance, Leadership and Management :

- The institution believes in providing quality technical education coupled with strong fundamentals along with practical perspectives and global standards through its vision and mission.
- The institution has a decentralized and institutionalized transparent mechanism in management, administration, financial and academic affairs. A total of 3 Statutory and 34 Non- Statutory Committees are functioning.

- The Strategic Plan of the institution is in line with the institute's vision, mission, long and short-term goals. The plan is deployed and executed across all the activities.
- The institution has a clearly defined organizational hierarchy and structure (Organogram) to support the decision-making process.
- The institution has a well-established e-governance system in Administration, Finance and Accounts, Student Admission & Support, and Examination
- The Institution provides effective welfare measures to all teaching and non-teaching staff. All statutory welfare measures are implemented.
- Teachers are provided with 100% financial support to attend conferences /Workshops and Professional body membership.
- Professional development/administrative training programs are organized by the institute every year for Teaching and Non-Teaching staff.
- Teachers attend FDPs/Refreshers courses/Online courses every year.
- The institution conducts internal and external financial audits regularly and prepares its annual budget by prioritizing the infrastructural requirements of departments and sections.
- The institution mobilizes the funds from government bodies like AICTE, DST, UGC, JNTUH and Telangana government, non-government bodies and individuals. MREC utilizes funds as per the needs of departments, sections and committees.
- IQAC contributes to sustain and enhance quality in all aspects of the institution such as the establishment of centers and cells, Publications, Placements, etc.
- IQAC reviews institution teaching-learning process, structures & methodologies of operations through academic departments.
- IQAC introduces quality initiatives such as AISHE submission, Feedback collection and analysis, Participation in NIRF, Collaborative activities with other colleges.

Institutional Values and Best Practices :

- About 26 programmes are conducted during the assessment period to address the issue of gender sensitization. Gender sensitization course is introduced in the curriculum.
- 24X7 surveillance through the CC Camera facility is in place in the institute besides the dedicated security personnel appointed to take care of the safety and security in the campus.
- The biogas facility and the solar power facility are available in the campus to help the institute partially in meeting its electrical power requirements while contributing to the cause of affordable and clean energy as prescribed in Sustainable Development Goals by the UNO.
- The institute utilizes electrical power in a responsible manner by utilizing LEDs to the maximum extent to cater to its lighting requirements. Wastage of electrical power is largely reduced with the help of Sensor-based controlling devices.
- The institute uses the traditional twin bin system and modern e-waste management techniques to deal with all kinds of waste - solid, liquid, e-waste, and other waste generated in the campus.
- The institute preaches 'save water, save future' through its NSS activities and implements it as well by means of rainwater harvesting, etc.
- The institute is known for its lush green lawns and dense leaved trees. Greenery is omnipresent in the campus. The institute advocates no usage of plastics on all the platforms.
- Energy, environmental and Green audits have become part of the institute's annual routine. The commitment of the institute towards a clean and green environment was duly appreciated by various agencies.
- Due consideration is given to Divyangjan students in making suitable policies for them and creating the required infrastructure to support them.
- About 70 activities were conducted to address the locational advantages and disadvantages and to promote universal values. Around 55 commemorative days/events were conducted.
- The institute emphasizes on moral code of conduct for various bodies, staff at various positions, and the students.
- Course Monitoring Committee meetings and Assisted Collaborative Teaching (ACT) hours are two of the many best practices implemented at the institute.

Profile

BASIC INFORMATION

Name and Address of the College	
Name	MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)
Address	MALLA REDDY ENGINEERING COLLEGE MAISAMMAGUDA - VILLAGE VIA- KOMPALLY MEDCHAL-MALKAJGIRI
City	Secunderabad
State	Telangana
Pin	500100
Website	www.mrec.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	A Raveendra	040-9502294258	9348161125	040-9348161125	principal@mrec.ac.in
IQAC / CIQA coordinator	N Rajeswaran	040-7382211597	7382211597	040-9348161205	drnrageswaran@mrec.ac.in

Status of the Institution	
Institution Status	Self Financing

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

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of Establishment, Prior to the Grant of 'Autonomy'	22-08-2002
Date of grant of 'Autonomy' to the College by UGC	20-01-2014

University to which the college is affiliated		
State	University name	Document
Telangana	Jawaharlal Nehru Technological University	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	28-01-2013	View Document
12B of UGC	28-01-2013	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	15-06-2020	12	As per AICTE norms the institute need to take EOA every year

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

If yes, name of the agency	NATIONAL BOARD OF ACCREDITATION
Date of recognition	15-09-2020

Location and Area of Campus				
Campus Type	Address	Location *	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	MALLA REDDY ENGINEERING COLLEGE MAISAMMAGUDA - VILLAGE VIA- KOMPALLY MEDCHAL-MALKAJGIRI	Urban	10	34151.42

ACADEMIC INFORMATION

Details of Programs Offered by the College (Give Data for Current Academic year)						
Program Level	Name of Program/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering	48	Intermediate and Telangana State EAMCET Rank State Level Entrance Test Conducted by State Council of Higher Education	English	120	115
UG	BTech,Electrical And Electronics Engineering	48	Intermediate and Telangana State EAMCET Rank State Level Entrance Test Conducted by State Council of Higher Education	English	120	89
UG	BTech,Electronics And Communication Engineering	48	Intermediate and Telangana State EAMCET State Level Entrance Test Conducted by State Council of Higher Education	English	180	180
UG	BTech,Computer Science And Engineering	48	Intermediate and Telangana State EAMCET Rank State Level Entrance Test Conducted by State Council of Higher Education	English	240	240
UG	BTech,Mechanical Engineering	48	Intermediate and Telangana State EAMCET Rank State level Entrance Test Conducted by State Council of Higher Education	English	120	98
UG	BTech,Information Technology	48	Intermediate and Telangana State EAMCET Rank State Level Entrance Test Conducted by State Council of Higher Education	English	60	60
UG	BTech,Mining Engineering	48	Intermediate and Telangana State EAMCET Rank State Level Entrance Test Conducted by State Council of Higher Education	English	60	34
UG	BTech,Computer Science And Engineering Artificial Intelligence And Machine Learning	48	Intermediate and Telangana State EAMCET Rank State Level Entrance Test Conducted by State Council of Higher Education	English	60	60
UG	BTech,Computer Science And Engineering Iot	48	Intermediate and Telangana State EAMCET Rank State Level Entrance Test Conducted by State Council of Higher Education	English	60	60
UG	BTech,Computer Science And Engineering Data Science	48	Intermediate and Telangana State EAMCET Rank State Level Entrance Test Conducted by State Council of Higher Education	English	60	60
UG	BTech,Computer Science And Engineering Cyber Security	48	Intermediate and Telangana State EAMCET Rank State Level Entrance Test Conducted by Conducted by State Council of Higher Education	English	60	60
PG	Mtech,Civil Engineering	24	AMIE or B.Tech or B.E and GATE or TS PGCET Rank allotted	English	30	30
PG	Mtech,Electrical And Electronics Engineering	24	AMIE or B.Tech or B.E and GATE or TS PGCET Rank Alloted	English	30	23
PG	Mtech,Electronics And Communication Engineering	24	AMIE or B.Tech or B.E and GATE or TS PGCET Rank Alloted	English	30	15

PG	Mtech,Computer Science And Engineering	24	AMIE or B.Tech or B.E and GATE or TS PGECET Rank Alloted	English	30	4
PG	Mtech,Mechanical Engineering	24	AMIE or B.Tech or B.E and GATE or TS PGECET Rank Alloted	English	30	5
PG	Mtech,Mechanical Engineering	24	AMIE or B.Tech or B.E and GATE or TS PGECET Rank Alloted	English	30	9
PG	MBA,Master Of Business Administration Mba	24	Any UG Degree and TS ICET	English	60	60

Position Details of Faculty & Staff in the College

Teaching Faculty

	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	47				91				237			
Recruited	39	8	0	47	70	21	0	91	141	96	0	237
Yet to Recruit	0				0				0			

Non-Teaching Staff

	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				150
Recruited	83	67	0	150
Yet to Recruit				0

Technical Staff

	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				93
Recruited	83	10	0	93
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	39	8	0	50	13	0	7	2	0	119
M.Phil.	0	0	0	1	3	0	4	1	0	9
PG	0	0	0	19	5	0	130	93	0	247

Temporary Teachers

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

Part Time Teachers

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

Details of Visting/Guest Faculties

Number of Visiting/Guest Faculty engaged with the college?	Male	Female	Others	Total
		0	0	0

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

Program	From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
PG	Male	153	10	0	163
	Female	104	6	0	110
	Others	0	0	0	0
UG	Male	3315	134	0	3449
	Female	1004	35	0	1039
	Others	0	0	0	0

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

Category	Year 1	Year 2	Year 3	Year 4	
SC	Male	125	118	111	126
	Female	41	47	39	39
	Others	0	0	0	0
ST	Male	71	51	52	41
	Female	14	14	15	22
	Others	0	0	0	0
OBC	Male	474	504	459	493
	Female	164	152	146	149
	Others	0	0	0	0
General	Male	220	300	330	266
	Female	99	117	143	105
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total	1208	1303	1295	1241	

Provide the Following Details

Number of Programs	UG programs not covered under the Autonomous status of UGC	PG programs not covered under the Autonomous status of UGC	Professional Programs offered	Self-financed Programs offered	New Programs introduced during the last five years
	0	0	13	13	0

EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Civil Engineering	View Document
Computer Science And Engineering	View Document
Computer Science And Engineering Artificial Intelligence And Machine Learning	View Document
Computer Science And Engineering Cyber Security	View Document
Computer Science And Engineering Data Science	View Document
Computer Science And Engineering Iot	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Information Technology	View Document
Master Of Business Administration Mba	View Document
Mechanical Engineering	View Document
Mining Engineering	View Document

QIF**1. Curricular Aspects****1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

Answer:

Malla Reddy Engineering College (MREC), established in 2002, is an autonomous institution affiliated to Jawaharlal Nehru Technological University, Hyderabad (JNTUH) and approved by UGC. The college caters to wide ranging aspirations and goals of student communities by offering relevant courses and programs in various streams of Engineering & Technology and Management. Our programs effectively respond to technological changes in the society. We have introduced several new courses such as Artificial Intelligence and Machine Learning, Internet of Things, Cyber Security and Data Science.

Curricula of all the courses offered by MREC are developed keeping in view the local, national and global developmental needs. Every department has its own Board of Studies (BoS). The members of the BoS who comprise the faculty and external subject experts deliberate on all aspects of the syllabus and make sure that Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) are relevant to local, national and global developmental needs. Implementation of Choice Based Credit System (CBCS) and collection of feedback from various stakeholders enables the institute to ensure that periodic revisions, both minor and major, are taken up to strengthen our POs, PSOs and COs.

The syllabus of each course is designed using the 'concept map' to attain the knowledge, skills, attitudes and values. The components of courses are chosen Preamble, Program Outcomes, Course outcomes, Assessment Pattern as per Bloom's Taxonomy, Course Level Learning Objectives, Concept Map, Syllabus, Text and Reference Books and Lecture Schedule. In order to identify first level course outcomes, inputs from Programme Outcomes (POs) and Programme Specific Outcomes (PSOs), Internal and External stakeholder feedback are taken into account. Subsequently, courses for each curricular component are identified. Then, course map is prepared based on pre-requisites. This is followed by preparing scheduling of courses and credits for each course. The course designers prepare course outcomes with corresponding Bloom's level and target level of attainment followed by course design.

In general, Curriculum maintains the balance in the composition of basic science, Engineering Sciences, Humanities and Social Sciences, Program Core, Program Electives, Open Electives, Project work and Employability Enhancement.

The curricula also specify various metrics used to assess the program outcomes. These include Home Assignments, Assessment Tests, Semester End Examinations, Project Evaluations and Laboratory Assessments.

Our Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) not only reflect the student needs but they also specify the means of transferring knowledge, skills, and attitudes to workplace, setting up of entrepreneurial ventures, and solving of local, national and global issues.

All the departments of the institute display programme outcomes, programme specific outcomes, and course outcomes in the web pages of the respective departments on the college website.

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

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Answer: 100

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Answer: 13

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Answer: 13

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Answer: 100

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years..

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
588	572	555	509	467

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Answer: 18.02

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

Answer: 485

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Answer: 2691

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Answer: 100

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

Answer: 13

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

Answer:

The institution integrates cross cutting issues relevant to gender, environment and sustainability, human values and ethics by introducing specific courses in the curriculum and various activities such as Orientation Programmes for first year students, Women empowerment programmes and counseling activities. The academic courses that address these issues are listed in the following Table attached.

In addition to these courses, the institution has Women Development Cell (WDC), Women Grievance Cell (WGC) and Anti-ragging Cell to deal with the issues relevant to gender, human values and ethics. WDC is constituted to facilitate women development & safety and respect to women. WGC looks into any complaint from girls & women staff. WDC organizes seminars and invited lectures by domain experts to bring awareness towards women empowerment and legal rights.

With an emphasis on the need of counseling the young minds, counseling cell is constituted to address the students' behavioral and academic issues. It strives to provide an admissible atmosphere to the students by organizing personality development camps to overcome the gender differences, conducting training programmes for the students and staff on counseling.

Anti-Ragging cell plans the activities like Anti-ragging campaign, formation of anti-ragging squad, Debate, Skits, Awareness talk by Government officials for curbing the ragging menace and making the students aware of human values. The cell addresses the complaints by the students, scrutinizes and approves the reports of the Anti-ragging Squad.

Title of the Course	Nature of the Course	Issue relevant to	Description
NSS and Sports/Yoga	Audit Course	Human Values	To give the students health and physical fitness to ensure mental and emotional balance
Gender Sensitization	Mandatory Course	Human Values	To provide a critical perspective on the socialization of men and women. To introduce students to Information about some key biological aspects of genders.
Environmental Science	Mandatory Course	Environment and Sustainability	An interdisciplinary approach to complex environmental problems using basic tools of the natural and social sciences, including geo-systems, biology, chemistry,

economics, political science and international processes

Professional Ethics	Mandatory Course	Human Values	The objective is to make Students familiar with professional ethics. It moulds the student to be trustworthy and honest with more professional responsibilities
Engineering Economics and Accountancy	Humanities and Social Sciences	Human Values & Sustainability	To explain the basic principles of managerial economics, accounting and current business environment underlying business decision making.
Management Fundamentals	Humanities and Social Sciences	Human Values	Through reading the text, references and discussion of cases students should be able to understand the fundamentals underlying the management of an organization.
Fine Arts / Foreign Language	Audit Course	Human Values	These subjects together are part of the extended world of humanities. The goal is to inspire and encourage our students to give their personal best in order to get ready to mount the challenge of higher education.
Entrepreneurship	Project	Human Values	The aim of this course is to inspire students to become entrepreneurs so that they will emerge as job providers rather than job seekers

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	View Document
Any additional information	View Document

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

Answer: 204

1.3.2.1 How many new value-added courses are added within the last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
61	53	51	19	20

File Description	Document
List of value added courses (Data Template)	View Document
Brochure or any other document relating to value added courses	View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Answer: 74.5

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
4379	4076	4010	1598	2386

File Description	Document
List of students enrolled	View Document
Any additional information	View Document

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Answer: 71.93

1.3.4.1 Number of students undertaking field projects / internships / student projects

Answer: 3150

File Description	Document
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from

1) Students, 2) Teachers, 3) Employers,

4) Alumni

Answer: A. All 4 of the above

File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document

1.4.2 The feedback system of the Institution comprises of the following :

Answer: A. Feedback collected, analysed and action taken and report made available on website

File Description	Document
Any additional information	View Document
URL for stakeholder feedback report	View Document

2. Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Answer: 92.27

2.1.1.1 Number of students admitted year-wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
1208	1303	1295	1241	1311

2.1.1.2 Number of sanctioned seats year wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
1392	1380	1392	1302	1428

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Answer: 99.96

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
488	481	488	458	500

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

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Answer:

The students admitted into this institution are from diverse social, economic, cultural and vernacular backgrounds, with disparate levels of knowledge and skills; hence their learning needs are different. After admission of students, MREC organizes orientation program for all the students by bringing the experts in the area of personality development to motivate them. The Institution has career guidance cell and also has mentoring system to help the students to address their concerns and improve their learning levels. The students are also given orientation towards communication and improving their language skills.

Guidelines to identify weak students and mentoring system:

The faculty members regularly conduct meetings regarding the progress of their mentees and are responsible to identify the students who scored less than 50% marks in the internals. Under the HoD's direction, the faculty advisors identify the students who score below 50% marks in three or more subjects and below 75% attendance. These students are considered academically weak students and this fact intimated to their parents.

Process for Assisting Weak Students

Identification Criteria	Actions Taken
Students scoring less marks	<ul style="list-style-type: none"> • Special classes (Remedial classes) are being conducted after the regular college hours. • During Assisted Collaborative Teaching (ACT) hour's special attention is given to weak students by the subject faculty. • Peer teaching is conducted by senior and fellow students. • Counseling is given to the students by subject handling faculty, concerned faculty advisors, Class In charges and HoD. • Participative and progressive weak students are given chance to improve teamwork to motivate and appreciate their efforts. • Students' performances are intimated to their parents by Mentors and the class in charges. • Remedial measures (counseling, extra classes and tutorial or ACT) are taken.
Failures in Semester End Examinations	<ul style="list-style-type: none"> • Examination failure reasons are analyzed. • Counseling is given to the student.

- Backlog classes are conducted before the commencement of the Supplementary semester-end examination.
- Assignments are given for analytical courses.
- Discussion on important questions and question bank.

Process for Encouraging Bright Students

Identification Criteria	Actions Taken
Rank Holders, Semester Toppers & Subject Toppers	<ul style="list-style-type: none"> • To motivate to get Gold medals and cash prizes given on Graduation Day. • To motivate to get Mementos and cash prizes given in department/College functions. • Encouraging them to take part in Research Activities. • Motivating them to take part in national-level competitions for projects. • Encouraging them to take part in co-curricular activities in national and international venues.
Students with First Class	<ul style="list-style-type: none"> • Motivation to continue Excellency. • Encouragement to get nationwide exposure. • Motivating them to attend conferences, workshop, and other co-curricular activities.

The complete methodology followed in MREC helps in encouraging the slow learner to become an advanced learner and prepare an advanced learner to reach the highest opportunities.

File Description	Document
Any additional information	View Document

2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)

Answer: 13.77

File Description	Document
Any additional information	View Document

2.3 Teaching- Learning Process

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

Answer:

The teaching methodologies of MREC are designed in such a way that they enable the students to develop their skills through theory as well as hands-on experience. Our students and faculty members interact regularly with industry, academic and various government organizations.

Following are the teaching methodologies followed by teachers in MREC

EXPERIENTIAL LEARNING	PARTICIPATIVE LEARNING	PROBLEM-SOLVING METHODOLOGIES
1. Laboratory Learning	1. Seminars/Conferences/Symposium	1. Industry oriented Mini Project
2. Industrial Visit	2. Group Assignments	2. Working Models
3. Internship	3. Group Discussion	3. Project Competition
4. Workshop	4. ACT Hours	4. Project-Based Learning

5. Value Added Courses

5. Peer Learning

6. Centre of Excellence

6. Collaborative Learning

7. Easy2Learn

8. Quiz

9. Business English Certificate

10. Campus Recruitment Training

11. Guest Lectures

12. MREC Academic Lectures

13. e-ATL

14. Student Association Council (SAC)

File Description	Document
Any additional information	View Document

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Answer:

MREC, being an Autonomous Institution, encourages intensive use of ICT enabled tools including online resources for effective teaching and learning process. All the faculty members of MREC are using ICT tools and resources. The Learning Management System (LMS) of MREC was established in the year 2015 and was effortlessly utilised by faculty and students. As MREC is using its LMS for a long time now, even during the COVID-19 Pandemic situation the teaching and learning process was not affected and progressed as usual online.

Learning Management System (LMS) & E-Learning Resources

- MREC has its own Learning Management Systems www.mrecacademics.com.
- The Study materials were made available on the website. (<https://mrec.ac.in/Examinations/ExaminationsStudyMaterials>).
- The video lectures of faculty members were uploaded to MREC Academic Lectures Youtube Channel. (https://www.youtube.com/channel/UCoN0ikxANX6C_asc8rTLq_Q/videos).
- Information & Communications Technology (ICT) enabled teaching methodologies and advanced technology is being followed by the faculty members in classrooms.
- The academic plan with the lesson plan, lab manuals and question banks with solution are made available at the very beginning of the semester.
- Use of multimedia teaching aids like LCD projectors, classrooms with internet-enabled computer/laptops/tablet systems are usually in use in the classroom.
- The electronic resource packages like IEEE Periodicals Package, Springer Link, Wiley Blackwell, Elsevier Science Direct, McGraw-Hill Access Engineering, J-Gate, ASTM Digital Library, DELNET, Infilbnet's N-LIST Program, Knowledge Hub Engineering e-library (k-hub), NPTEL, SPOKEN TUTORIAL and Digital Library are available. The faculty members effectively utilize Audio-Visual aids to demonstrate the concepts to the students using the resources from National Programme on Technology Enhanced Learning (NPTEL) to enhance the learning experience (<https://mrec.remotlog.com/>).
- USB Hard disk containing web and video courses (offline) from NPTEL is accessible to faculty and students from the server installed in the library. These courses are part of LMS. Also Available on local Server.
- Online tests are conducted, assignments are submitted by students and evaluation of the same is done through the learning management system.
- A sufficient number of books, journals, e-journals and e-books are available in the library. The research journals are available online and a facility for accessing these journals is provided through a proxy server on the campus.
- All the departments conduct seminars, workshops and guest lectures on the new developments in the core subjects for effective teaching and learning by the faculty members and students in each semester.
- The seminar halls are equipped with multimedia facilities using ICT tools. Invited talks and webinars are conducted in the seminar hall using ICT facilities.

File Description	Document
Any additional information	View Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document

2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Answer: 14.4

2.3.3.1 Number of mentors

Answer: 304

File Description	Document
Circulars pertaining to assigning mentors to mentees	View Document
Any additional information	View Document

2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution

Answer:

Preparation and Adherence to Academic calendar:

An academic calendar is framed based on the discussions with the Internal Quality Assurance Cell (IQAC), Controller of Examinations, Department Heads, Department level consultative committee and other decision-making authorities. The framing is carried out at least 15 days before the commencement of the academic year. **The academic calendar is issued to the faculty members and students and published on the institution website.** <https://mrec.ac.in/Academics/AcademicsCalendar>

The academic schedule provides

- Date of commencement of the academic session.
- Duration of the semester.
- Commencement of Continuous Internal Evaluation (CIE) test.
- Last working day.
- Parent-teacher meeting.
- Commencement of practical and semester-end examinations (Regular & Supplementary).
- Study period, and date of reopening of the forthcoming semester etc.

The Adherence to the academic calendar is ensured by periodic reviews in different levels like Course Monitoring Committee (CMC) meetings, Departmental meetings, Program Assessment Committee (PAC) meetings.

Teaching Plans:

In our institution, the teaching plans (Course plans) are prepared by the faculty at the beginning of the semester and circulated to students. Students can view the plan and prepare accordingly. The teaching plan contains the module number, topic name, number of hours, teaching methodology and date.

Teaching plans support pedagogical design capacity. They play a pivotal role in achieving the specified learning objectives and outcomes. They act as useful guides to both the teachers and the students, helping in visualizing the entire teaching-learning process. Since teaching plans help in sequencing and reinforcing the contents and concepts, thereby enabling the students to learn effectively and are great aids to regulate the learning process and optimize students learning experience, our institution takes maximum care in preparing effective lesson plans and implementing the same meticulously to achieve the desired results.

File Description	Document
Upload Academic Calendar and Teaching plans for five years	View Document

2.4 Teacher Profile and Quality

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

Answer: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	View Document
Any additional information	View Document

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Answer: 19.83

2.4.2.1 Number of full time teachers with *Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D’Lit.* year wise during the last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
88	88	53	53	44

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Answer: 3.92

2.4.3.1 Total experience of full-time teachers

Answer: 1246.37

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

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Answer: 19.8

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
18	25	21	23	12

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Answer: 11.07

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
514	539	513	462	412

File Description	Document
Any additional information	View Document

2.5.3 IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution

Answer:

The institution has an automated academic, examination and evaluation process. The controller of the examinations office has adopted student-centric and transparent practices by automating the examination processes. Starting from course registration to publishing the results is carried out digitally. The following are the IT integration and reforms in the examination procedures and processes.

- EMS services are available to integrate all the activities in the examination cell. The pre and post-examination activities are integrated, starting with examination notification, generation of timetables, list of eligible students to issue hall tickets based on the attendance database, scanning the marks slips and processing the results and printing the reports, certificates etc.
- Complete automation of the examination processes helps in the successful execution of examination process such as monitoring of examination fee payment, examination schedule, seating arrangement, attendance monitoring, coding and decoding of scripts, marks data entry, preparation of programme wise results etc.,
- Payment gateway is also available for the students' payment of various fees online to make the registrations online for various services.
- Online registration and downloading of hall tickets of the candidates is implemented in MREC.
- OMR based answer script was introduced in MREC for ensuring strict confidentiality by avoiding manual coding in the examination and evaluation system.
- The systematic Digital Evaluation process supported by Examination Management System (EMS) allows timely declaration and announcement of the results.
- MREC quickly responds to the students' grievances related to any examinations and a mechanism is developed for quick settlement of grievances.
- Online publishing of results is made available in the MREC examination portal. Parents will be informed of the same through SMS immediately after the declaration of the results.
- Since the introduction of CBCS in MREC, Grading System was being implemented to evaluate and assess students in place of the percentage of marks.
- Printing and issuing the marks memos and provisional degree certificate in a shorter duration.
- Student services like transcripts, Provisional Certificate, etc., are issued instantly.
- Digital maintenance of students marks records and different types of certificates: Transfer Certificate, Bonafide Certificate, Custodian Certificate and Transcripts.

Question papers moderation and selection

1. Moderators are selected based on the subject handled and total experience.
2. Moderation is done on the same day **3 hours** before examination of the question paper received from Question Paper setters in a highly confidential section of the examination branch.
3. The moderation procedure includes identifying and rectifying grammatical mistakes, out of syllabus questions, reframing the question.
4. Chief Controller of Examination selects one Question Paper out of Moderated Question papers, received from Question Paper setters, two hours before the examination, and then it goes for Printing.

File Description	Document
Any additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Answer:

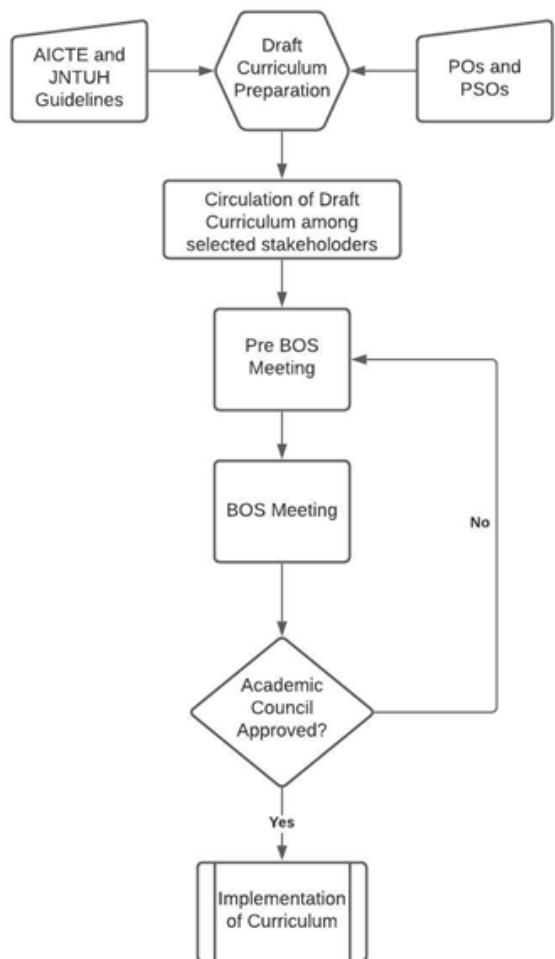
Program Specific Outcomes (PSOs) are the specific skill requirements and accomplishments to be fulfilled by the students at the micro-level and by the end of the program. The programme coordinators prepare the PSOs, usually two to four in number, in consultation with course coordinators. The BOS, including the Head of the Department and subject experts, of the individual departments, will discuss the same and approve it after endorsement by the Principal.

Program Outcomes (POs) are broad statements that describe the professional accomplishments which the program aims at, and these are to be attained by the students by the time they complete the program. POs incorporate many areas of inter-related knowledge, skills and personality traits that are to be acquired by the students during their graduation.

Course outcomes (COs) are direct statements that describe the essential and enduring disciplinary knowledge, abilities that students should possess and the depth of learning that is expected upon completion of a course. They are clearly specified and communicated. The Course Outcomes are prepared by the course coordinator in consultation with concerned faculty members teaching the same course. The Module coordinator will verify it. Finally, they are discussed in the concerned department's BOS meeting course-wise and approved.

Outcome-Based Education (OBE) is implemented in this Institute since 2012 as OBE give emphasis on what is expected from the student when they finish their course. **The POs/PSOs of the programme are published through electronic media at individual department site located on the college website <http://www.mrec.ac.in/>. The COs of the courses are also published through electronic media at the Department site.**

The process for designing the program curriculum is given below,



Each course has a defined set of course outcomes and corresponding evaluation criteria. The course outcomes are mapped to the program outcomes which are used to provide the quantitative measurement of how well the program outcomes are achieved. In each course, the level of attainment of each CO is compared with the predefined targets, it is the course coordinator who takes the necessary steps to improve to reach the target. Sample activities for communicating the Vision, Mission and PEO, PSO and PO are as follows:

Activity	Schedule	Stakeholders
First Semester Orientation Programme	One Week before the commencement of first semester classes	First Semester Students
Association Inaugural Function	As per the Academic Calendar	Senior Students
Faculty Meeting	First faculty meeting in every semester	Faculty
Technical/Support Staff Meeting	The first meeting in every semester	Support/Technical Staff
Parent-Teacher Meeting	As per the Academic Calendar	Parents
Alumni Meeting	As per the schedule by Alumni Association	Alumni
Board of Studies Meeting	As per the academic calendar	Industry personnel, alumni, experts from higher learning institutions
Industry Supported Courses	Scheduled based on the availability of the experts	Industry personnel

	who are offering the course	
Events organized Professional societies	As per the schedule finalized by the staff coordinator	Professional Society

File Description	Document
Link for Additional Information	View Document

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

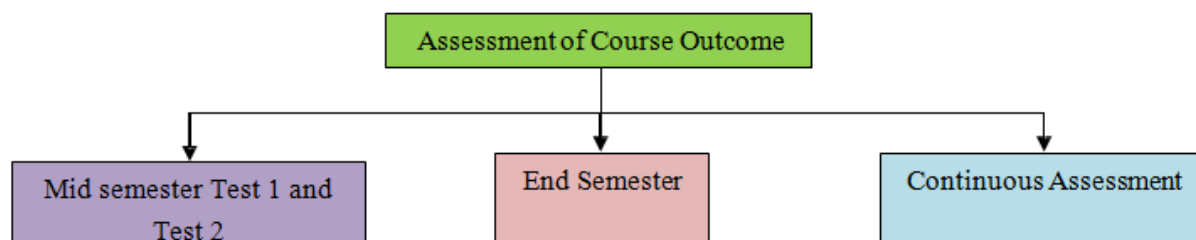
Answer:

1. Attainment of Course Outcomes

- Direct assessment tools are used to evaluate course outcomes.
- The results of each course of each batch of students have been considered for the assessment of the level of attainment of course outcomes and program outcomes.

Direct evaluation techniques

- Giving home assignments and study the performance of each student
- Course assessment
- Conduct mid-semester exam
- Conduct end semester exam covering the entire syllabus of the course
- Laboratory assessment
- Conduct departmental seminar for each student about any relevant topic to assess communication and presentation skills.
- Project Assessment
- Assessment of Internship project
- Conduct minor project review meeting at the end of the 7th semester and final project review at the end of the 8th semester.

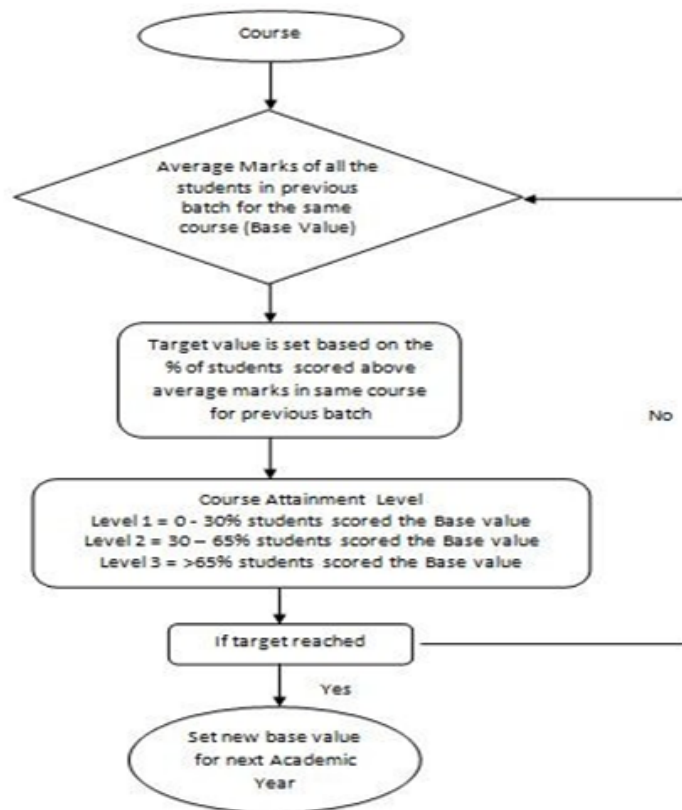


Direct Assessment

Description	Assessment Tools	Frequency
Course	Mid-semester tests (1 and 2)	Twice in a semester
	Assignment	Twice in a semester
	End Semester Exam	Once in a semester
Laboratory	Continuous Assessment (Experiments, Lab observation and Record)	During every laboratory class
	Semester lab exam (Perform a given experiment in the lab, Viva Voce)	Once in a semester
Project	Minor Project Presentation and Viva-Voce	Once in a Programme
	Major Project Presentation and Viva-Voce	Once in a Programme

2. Assessment Tools for the Programme Outcomes

The assessment of the Programme outcomes is made based on the indirect and direct assessment methods. In this 80% of direct assessment and 20% of indirect assessment considered for the attainment.



i. Direct Assessment Tools

Assessment through the attainment of COs

The average attainment of all students for every course is calculated and mapped with respective POs (based on CO and PO mapping) according to the weightage of each POs. The attainments of the POs are scaled to 80%.

Direct Assessment	Relevance towards the attainment of POs
Home assignment	To make the student familiar with the basics of the course offered
Course Assessment (Mid and end semester exams)	To evaluate the student with the discussed techniques and to assess his/her ability by the problems given in the exams through grades
Laboratory assessment	To test the student on his/her knowledge in experimental techniques discussed in the labs and interpretation of the results
Seminar	<ul style="list-style-type: none"> o To evaluate the presentation skills and ethics o To introduce and acquaint student in research
Project Assessment	<ul style="list-style-type: none"> o To evaluate the student on his/her numerical, experimental and presentation skills o To assess the student contribution in his/ her research /thesis/ project. o To test the project thesis against plagiarism to impart professional ethics

Relevance towards the attainment of POs

Indirect Assessment	Relevance towards the attainment of POs
Graduate Survey	The assessment of the survey done on each batch of the program gives the information on how to upgrade the infrastructure, classroom/ laboratory facilities and delivery of lectures.
Alumni Survey	Gives information on improvement of the course syllabus and present developments in the relevant fields
Employer Survey	Gives information on more focus /importance to be given in the course syllabus and training

File Description	Document
Any additional information	View Document

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Answer: 95.61

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

Answer: 1024

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

Answer: 1071

File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document
Any additional information	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Answer:

File Description	Document
Upload database of all currently enrolled students	View Document

3.Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

Answer:

- MREC conceived its own policy to promote research at all levels – students, junior level and senior level faculty members. The dedicated Research & Development Cell (R&D cell) is established with an objective to create a high-quality research ambience in the institute that helps to take up high quality research.
- The R & D Cell evolves strategies and policies to encourage the faculty members with incentives for publishing quality research papers.
- Another big task handled by the R & D Cell is to create an ecosystem both in terms of infrastructure and scholastics that would enable the faculty members and students to take up research in the areas of Computation, Energy, Environment, Image Processing, Materials, Manufacturing, Nanotechnology, Telecommunication, and Sensor Networks and Simulation studies.
- The intention of the Research Promotion Policy is to build a lively ambience of research amid faculty members and instill research ability among the students.
- This Research Policy forms the basics of the research ethics of the college and is implemented in all the departments and it serve as the guidelines for the functioning of the Research council of the college.
- To achieve high quality research ambience in the Institute, a Research & Development Centre is set up with the objective of developing the strategic plan for scientific and technology research and ensuring the implementation of such plans.
- To assist the young researchers, R&D committee is established.
- In order to motivate the faculty members towards research and publishing their research findings in reputed journals with impact factor and for attending the conferences, incentives are given to faculty members.
- Full autonomy has been given to the faculty members to carry out the research as per terms and conditions given by funding agencies.
- Faculties are encouraged to undertake consultancy work.
- The college provides seed money grant to support research in all frontier areas of Science, Engineering & Technology by its faculty members.
- Incubation Center of the college endeavors to enable the young minds to transform their innovative ideas with multidisciplinary expertise into viable business plans and actions.

- Research ethics committee promotes high ethical standards in research and creates awareness about plagiarism concerns and its mitigation.
- The college aims at strengthening its research leading to filing patents and incentivizes its faculty members for filing application.
- The administration ensures that a right mix of faculty members is maintained in each of the departments such that every department should have few senior researchers in various streams to provide guidance to middle level and entry level faculty members in their research activities. Thus, a healthy cooperative environment is ensured in the department level to boost the research.
- Recruitment of PhD faculties is at the core of the vision of elevating the teaching and research standards of the college.
- Faculty members are encouraged to attend short term programmes relevant to their research fields by supporting them financially.
- The Research policy encourages faculty and students to take up socially relevant topics as a contribution towards society and nation at large.

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document
Any additional information	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Answer: 8.97

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
10.31	9.22	8.255	9.03	8.05

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Any additional information	View Document

3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Answer: 3.33

3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
14	8	14	12	7

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers	View Document

3.2 Resource Mobilization for Research

3.2.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Answer: 140.65

3.2.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
77.33792	3	0	40	20.315

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

3.2.2 Percentage of teachers having research projects during the last five years

Answer: 1.39

3.2.2.1 Number of teachers having research projects during the last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
11	1	0	1	10

File Description	Document
Names of teachers having research projects	View Document
Any additional information	View Document
Link for additional information	View Document

3.2.3 Percentage of teachers recognised as research guides

Answer: 2.83

3.2.3.1 Number of teachers recognized as research guides

Answer: 9

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Any additional information	View Document
Link for additional information	View Document

3.2.4 Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

Answer: 47.5

3.2.4.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
5	1	0	8	5

3.2.4.2 Number of departments offering academic programmes

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
8	8	8	8	8

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Any additional information	View Document
Paste link to funding agency website	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Answer:

The institution has created an ecosystem for innovation including incubation centre and other initiatives for creation and transfer of knowledge. The faculty members are empowered to take up research activities utilizing the existing facilities.

a) Entrepreneurship Development Cell:

The Entrepreneurship Development Cell (EDC) of MREC is an individual cell which functions under the supervision of Dean (EDC), and supported by department level coordinators. EDC organizes the work plan of the Entrepreneurship promotion activities. The cell keeps the students informed and encourage them for different Entrepreneurship related activities. The EDC has collaboration with Indian School of Business (ISB) Hyderabad and our students pursue different certificate and diploma courses from ISB. Also, a special course on “Entrepreneurship” is being taught for the three years. It functions with Institute Innovation Council and Technology Business Incubator. It has an exclusive 3D Printer and system and software facilities. The E-Cell conducts events such as Hackathons, Biz plan, E-quiz on business, etc and organizes workshops and guest lectures to motivate the students in entrepreneurship.

b) Women Entrepreneurship Development Cell (WEDC)

We established separate Women Entrepreneurship Development Cell (WEDC) for the women empowerment under Women Development Cell (WDC). Engage in right pursuit of imparting quality and value based education; MREC has always explored the new avenues for student development in sustainable way. In line with same deliberation, At MREC, we have initiated women entrepreneurship Cell to ignite the spirit of an Entrepreneurship amongst our female students. Entrepreneurship has been identified as one of the major trends shaping business, economy and even society. Today’s world is changing at surprising pace with wind of Globalization and IT revolution. Entire world is sensing political and economical transformation. The changing market conditions have thrown up opportunities for emerging businesses. This has also created economic opportunities for women who want to own and operate business.

c) MREC Incubation-Hub:

MREC Incubation-Hub, an Incubation Centre, of Malla Reddy Engineering College was established on 2015 **at our Campus**. The main objective of the M-Hub is to promote entrepreneurship activities and hone the creative talent of the students at the college itself.

MREC Incubation-Hub will encourage students with a special and entrepreneurial bent of mind. Students could come up with various innovative and creative ideas and can utilize their talent for starting their new ventures. The hub will serve as a platform for budding entrepreneurs so that they can gain awareness and exposure in business incubation programs. MREC Incubation-Hub also helps different entrepreneurs to turn their ideas into viable businesses.

The MREC became an Indo Universal Collaboration for Engineering Education (IUCEE) consortium member in 2016, and since then has been actively involved in spreading IUCEE’s vision and as a member of the IUCEE-EPICS Partnership for 2017-18 and 2018-2019. The college has got a crucial role to play in designing solutions for the problems faced by the surrounding villages and in the process the college is actively involved in the Engineering Projects in Community Services (EPICS) programme by the IUCEE.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the last five years.

Answer: 196

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year-wise during the last five years.

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
36	35	48	35	42

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document
Any additional information	View Document

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following:

1. Inclusion of research ethics in the research methodology course work
2. Presence of Ethics committee
3. Plagiarism check through software
4. Research Advisory Committee

Answer: A. All of the above

File Description	Document
Any additional information	View Document
Link for additional information	View Document

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/ supervisors provided at 3.2.3 metric) during the last five years

Answer: 1.56

3.4.2.1 How many Ph.Ds are registered within last 5 years

Answer: 14

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

Answer: 9

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

3.4.3 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Answer: 4.97

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
384	355	299	397	208

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

Any additional information	View Document
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3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years

Answer: 1.42

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
108	98	134	99	31

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4.5 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Answer:

File Description	Document
Bibliometrics of the publications during the last five years	View Document
Any additional information	View Document

3.4.6 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Answer:

File Description	Document
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

3.5 Consultancy

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Answer: 132.31

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
64.69	35.062	20.896	5.233	6.43

File Description	Document
List of consultants and revenue generated by them	View Document
Any additional information	View Document

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

Answer: 17.84

3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

Answer:

2019-20 2018-19 2017-18 2016-17 2015-16
 3.1361 7.5841 1.135 0.575 5.4075

File Description	Document
List of training programmes, teachers and staff trained for undertaking consultancy	View Document
List of facilities and staff available for undertaking consultancy	View Document
Any additional information	View Document

3.6 Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community, sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Answer:

Malla Reddy Engineering College conducts and takes part in a variety of extension activities with a twofold objective of not only sensitizing students in various public issues but also contributing to the neighborhood and reinforcing community participation. The NSS schemes of the Institute initiated various events like organizing and promoting Swatch Bharat Abhiyan, blood donation camps, awareness programs on anti-ragging, rural development camps, educating the villages, etc. The college also contributes much through the NSS wing which has multi-faced activities like environmental issues, working with orphanages, etc by involving the volunteers. Events like Haritha Haram, donating for victims affected by natural calamities, digitization and many are successfully conducted with the cooperative participation of the volunteers in collaboration with other agencies/NGOs. The students participate actively in the International Yoga Day as Yoga is considered to be the best art to control the mind through the body.

Activities like save our ponds and lakes, tree plantation drive seeded for the Green Revolution, Preparation and distribution of clay Vinayaka idols during the Ganesh Chaturthi festival has been followed as a part of environmental awareness and also motivate the neighborhood to take similar steps in this aspect. Blood donation camps in collaboration with the hospitals are the usual facet (twice a year) where the faculties and students donate blood for the cause. Our NSS unit has a wide vision of protecting our globe from global warming by creating awareness among the people through programs like saying 'NO' to plastics, use of smoke-free crackers, etc.

The Institute has a Centre of Excellence where the ideas get further elaborated by framing a problem, understanding the end-user requirements, brainstorming and identifying a set of solutions, and finally narrowing down to a solution.

The main motto of the health club of MREC is "Health is Wealth". The Health Club provides the students with a piece of basic knowledge on health and nutrition, usage of preventative health resources, and tracking and assessment of health club activities.

S No	List of activities conducted every year	Impact on Students
1	Tree plantation & Say NO to Plastics	Students are motivated towards social service and develop an awareness of environmental issues.
2	Yoga Day	It helps in the Physical Development of the Students by exercising our traditional art of yoga.
3	Blood Donation Camp	Development of emotional intelligence
4	Independence Day and Republic Day Celebrations.	It helps in the moral development of the students and also helps in building patriotism and a spirit of sacrifice.
5	Health-related awareness camps	Health-conscious programs increase students' awareness of palliative care.
6	Conducting programs to create awareness among the villages in various social related issues.	The students develop empathy toward others.

File Description	Document
Upload Any additional information	View Document
Paste link for additional information	View Document

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

Answer: 50

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
3	15	25	6	1

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

3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

Answer: 143

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
50	26	25	22	20

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document
Any additional information	View Document

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Answer: 100

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
4379	4355	4457	4419	4521

File Description	Document
Reports of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document
Any additional information	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Answer: 1138.8

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
1518	2144	838	642	552

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document

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

Answer: 58

3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
28	12	8	8	2

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other Institutions etc during the last five years	View Document
Any additional information	View Document

4.Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

Answer:

Malla Reddy Engineering College, Main Campus, Maisammaguda, Dulapally, Medchal-Malkajgiri District, Secunderabad, Telangana State- 500100, established in the year 2002 is one among top 259 colleges in Telangana State. The college is located in 10 acre campus with 34151.42 Sq. mts built up area, and is permanently affiliated to JNTUH. The college is conducting 11 undergraduate and 7 post graduate programs. MREC has state of the art infrastructure, creating an environment for progressive learning and development. We have well equipped classrooms and laboratories as per the AICTE requirements to cater for the academic needs of the students. Each lab is handled by one faculty supported by a co faculty. Also, every lab has a lab In charge and Assistant, who provides constant support and ensures maintenance of the laboratories.

Apart from regular labs, we have well established R&D Labs, Project Labs industry tie up MOU laboratories like IBM, HP Devops, CISCO, Google Cloud, Sales Force and Red Hat Linux campus connect lab, LabVIEW, GT Lab, STAAD.Pro, CREO, ANSYS, HFSS Communication Design Suite Software, CADENCE, O-PITBLAST, STRAYOS etc., in order to fill the gap between the curriculum and industry. Every equipment or program in the lab is calibrated and the records of the same are maintained. Systems are protected with antivirus software.

The faculty innovations in teaching and learning are as follows

1. Learning management system (LMS Modules)

LMS of MREC is a student centric learning facility for the students to refer the study materials anytime within the campus premises. It is a centralized source for notes and slide based presentation for all the branches.

2. NPTEL Materials

For each subject there is one hour NPTEL session allocated per week. The prerecorded NPTEL videos are projected to the students during NPTEL hour. The relevant study materials can be accessed from NPTEL.ac.in & NPTEL video. in

3. Scope of self-learning/learning beyond syllabus

Students are given assignments and practical projects to promote self-learning, Dash Board, Act hour classes, NPTEL, e-ATL and internet resources help in self-learning.

4. Centre of Excellence (8 No's)

Malla Reddy Engineering College boasts of 8 Centers of Excellence which provide opportunities for in-depth understanding of the most relevant industry technologies and job oriented courses.

- Robotics Research Center
- Centre for Additive Manufacturing
- Creative Computing Center
- Editing & Animation Studio
- Green Mat Studio
- Dubbing Room
- Media Centre (Learning Management System)
- LabVIEW

All facilities are optimally utilized as per academic schedule

The facilities available for teaching learning in MREC in all Departments can be as follows

Infrastructure, ICT classrooms and Laboratories:

· The Institution raised its infrastructure facilities to 108 laboratories, 83 classrooms, 24 Tutorial rooms, 06 Seminar Halls, 05 R&D Centers, 02 Workshops, 02, Data centers, 1 Center of Excellence and 2 Auditoriums.

· All the class rooms, seminar halls and many of the Laboratories are equipped with ICT facilities. All the laboratories are well equipped and maintained. Computer laboratories are installed with licensed software as well as open source software.

· 2 : 1 Student Computer Ratio is being maintained in the institute

File Description	Document
Upload Any additional information	View Document
Paste link for additional information	View Document

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

Answer:

A sound mind coupled with a strong physique is the key to success. Sports activities occupy a significant part of the college curriculum in Malla Reddy College of Engineering. Large playing fields support a wide variety of games, such as Cricket, Football, Volleyball, Hockey and Kho-Kho. There are also dedicated spaces for Indoor sport, including Table Tennis, Badminton, Weight Lifting, Power Lifting, Chess, and Caroms. Our Outdoor facilities include courts for Basketball, Volleyball, Handball, and Throw Ball. MREC also has a large indoor gymnasium facility with areas marked for Yoga, Weight Training and Cardio exercises. We host Malla Reddy Cricket Tournament inter collegiate every year Students with a passion for music and dance are encouraged to perform/take up training in these arts.

Faculty with skill in any of these arts ably support students through campus festivals and motivate them for competitions held outside. Established fusion and contemporary dance groups in the city also hold classes at MREC. For those wishing to explore photography a club brings together students to organize nature walks and other such events. We have very active Chammakura Chadramma Memorial Major and Mini Auditoriums to support students those who have a passion in scripting, acting designing sets or producing a play and Cultural and Annual days by Student Association Council (SAC). The literary club of MREC brings together avid book lovers from all around the campus.

Hostel

Modern, hygienic and eco friendly hostels are available. Separate Hostels for Girls & Boys with Library, computers with Internet, Gym and Yoga facilities available. Hostels are located in the Campus

Cultural Activities:

In order to encourage student innate talents the College Cultural Committee conducts events like essay writing, debates, group discussions, general quiz, dumb C, elocution, mimicry, volte-face, extempore mock show, singing, skit etc. It gives an opportunity to the students to show their skill, display their leadership qualities and unleash their latent and hidden talents.

Student Association Council (SAC) aims at fostering the all-round development of the students 'academic, culture, social, physical and technical I dimension. In tune with this objective of SAC in general and to cater to the technical dimension in particular.

- Arrange for seminars by both the faculty members and students on the relevant topics.
- Arrange paper presentation sessions in the concerned areas of research.
- Identify competent resource person in the relevant area (s) and arrange for guest lecture(s).
- Arrange ideation/design contests.
- Conduct technical quizzes.
- Coordinate with the faculty coordinator for college website for regular updates of the events conducted in the website and college official Facebook page.
- Submit a brief report after the completion of each event with relevant photos to the Coordinator, SAC through the concerned HoD.

The college provides Malla Reddy Boys Hostel with 210 Rooms & Girls Hostel with 180 Room facilities. Well furnished hostels with 24 hours security, Wi-Fi enabled, 24 hours drinking water, water heaters and water coolers, CCTV Camera surveillance, Gymnasium, and a full-time doctor is available who can take care of medical emergencies

File Description	Document
Upload any additional information	View Document
Geotagged pictures	View Document
Paste link for additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Answer: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Answer: 89

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Paste link for additional information	View Document

4.1.4 Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

Answer:

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

Answer:

4.2 Library as a Learning Resource

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

Answer:

The central Library of Malla Reddy Engineering College is the treasure house of information and the mission of the library is to provide information services and access to bibliographical and full text digital and printed resources to support the scholarly and informational needs of college community. Details of the collection of some of the rare books, costly books etc are given below.

MREC Library and Information Resources Centre is one of the important central facilities of the Institute, established in the year 2002, catering to the educational and information needs of faculty and students in Engineering at both UG & PG level, Humanities & Sciences and Management. The MREC Library supports the teaching, research, and learning mission of the Institute by providing open access to the broadest possible range of ideas, opinions, and knowledge. The main objective of the library is to make the library an effective Learning Resource Center and shape it to play an effective support role by contributing to the quality of the technical education imparted in the Institute. Library's On-line Public Access Catalog, Digital Library facilities enabling browsing of paid and open access e-resources through Library's Intranet Website is part of its endeavor in creating an effective learning environment.

The library is an automated open access system. It remains open on all working days of the Institute. The library staff work relentlessly towards providing excellent services to the Faculty and Students to help them to achieve their goal.

Library Automation

Library is fully automated and KOHA is the software used for Circulation, Procurement, OPAC and Project Reports. All the library documents are bar-coded and books are issued to users by reading the barcode of the document Automation in the KOHA is very versatile and is extensively used for generating all the reports that are required in day to day requirements of the Library.

Library Networking

Since the Library is fully automated, the holdings of the Library could be searched using OPAC. The holdings include the books and Journals, syllabus, question papers and Project reports.

The library is member of the DELNET since last 5 years. It is being extensively used for ILL and searching the database of other member libraries.

The Library has become the member of the NDL to access the vast-resources that are available on Delnet database.

The Library has the internet facility through which the e-resources could be accessed.

On an average around 800 students make use of the Library resources as most of the day time the student's are attending the classes (Reference section).A register is maintained in order to know the number of users make use of the reference section.

The Central Library is a member of the VTU E-Resources Consortia. The users of the Library can access publications of all major publishers like Elsevier, Springer, ASCE, IEEE etc. The users can access around 13,000 E-books and 11,611 International journals. The user has access to around 18,100 journals for which only abstract is available.

File Description	Document
Upload any additional information	View Document
Paste Link for additional information	View Document

4.2.2 Institution has access to the following:

1. e-journals
2. e-ShodhSindhu
3. Shodhganga Membership
4. e-books
5. Databases
6. Remote access to e-resources

Answer: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e-books , e-ShodhSindhu, Shodhganga Membership etc	View Document

4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Answer: 37.68

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
42.56	38.56	38.29	32.5	36.47

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document
Any additional information	View Document

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the last completed academic year

Answer: 23.33

4.2.4.1 Number of teachers and students using library per day over last one year

Answer: 1096

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities

Answer:

The management has been substantially augmenting the following Teaching Facilities since 2015:

- In the year 2015-16, 61 classrooms were provided with ICT Facilities that increased to 83
- Classrooms by 2019-20 for e-learning and training programs.
- Internet facility was upgraded from 50 Mbps to 500 Mbps.
- Three language labs were updated with infrastructure, computers, and software.
- The library is updated with ILMS software.

The management has been substantially augmenting the following IT facilities since 2015:

- Internet connectivity was increased from 50 to 500 Mbps.
- Intra-net connectivity is provided on the campus with 20 GBPS fibre optical cable.
- A new firewall 'Cyber room-300NG' was installed for the security of the campus network with filtering features.
- ERP software has been installed in 2015 for student and staff information management.
- All the systems have been provided with backup through the uninterrupted power supply.
- Seqrite antivirus software has been installed for all the systems.
- The Institute has 200 surveillance cameras.
- Biometric attendance system for PG students and Faculty.
- A centralized server room with 8 servers was set up.
- The Examination branch is fully automated with BEES BET PLUS software.
- IoT lab was established in 2018-19.
- MREC Digital Evaluation through BEES Software

Periodically computers are updated as under:

- A.Y. 2019-20: 300 new HP computers were procured with a configuration of core i5 4th generation of 8GB RAM, 500 GB HDD.
- A.Y. 2018-19: 500 new DELL computers were procured with a configuration of core i3 7th generation of 4GB RAM, 1TB HDD.
- A.Y. 2017-18: 300 new DELL computers were procured with a configuration of core i3 6th generation of 4GB RAM, 500GB HDD.
- A.Y. 2016-17: 550 new DELL computers were procured with a configuration of core i3 6th generation of 4GB RAM, 500GB HDD.
- A.Y. 2015-16: 200 new DELL computers were procured with a configuration of core i3 4th generation of 4GB RAM, 500GB HDD.

The total number of computers presently available is 2130 that is on LAN.

Frequency Up-gradation:

- A.Y 2019-20: 200 computers were upgraded with 8GB RAM from 4GB in various labs.
- A.Y. 2018-19: 3 new servers systems were purchased, with 2 servers of 64GB RAM, 16TB, 8TB
- HDD and 1 server with 128GB RAM, 18TB HDD along 12GB of the graphic card in the server room.
- A.Y. 2017-18: RAM capacity of the 2 server systems was upgraded from 8GB to 16GB and 8GB to 24GB respectively.

Internet & Wi-fi

- Full coverage of Wi-Fi.

- Extension of Wi-Fi to the canteen.
- 500 Mbps speed internet.
- 70 Wi-Fi access points with extenders provided to cover the entire campus.
- Internet connectivity to all computers.
- In the A.Y 2017-18, the Cyber room firewall was deployed for handling enhanced load on network and applications, catering to academic and administrative processes, for a secure campus network.

Internet Provider: Vainavi Industries Ltd.

MREC Faculty App for taking Online Classes

- Faculty profile
- Mark my attendance
- Publications
- Courses Manager
- Class Time table
- Online Classes
- Academic Calendar
- Events
- News
- Messages
- Support
- Log out

<https://play.google.com/store/apps/details?id=info.app.mrecautonomous>

www.mrecexams.com

www.mrecacademics.com

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.3.2 Student - Computer ratio (Data for the latest completed academic year)

Answer: 2.06

File Description	Document
Upload any additional information	View Document
Student - computer ratio	View Document

4.3.3 Bandwidth of internet connection in the Institution.

Answer: ≥50 MBPS

File Description	Document
Upload any additional information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.3.4 Institution has the following Facilities for e-content development

1. Media centre
2. Audio visual centre
3. Lecture Capturing System(LCS)
4. Mixing equipments and softwares for editing

Answer: A. All of the above

File Description	Document
Upload Additional information	View Document

Institutional data in prescribed format	View Document
Link for Additional information	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Answer:

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year wise during the last five years (INR in lakhs)

Answer:

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

Answer:

The institution has the structured system for maintaining and utilizing the facilities available at MREC Campus. Facility management team maintains the physical and academic support facilities.

Sports facility Maintenance

The sports facilities of MREC are maintained by physical education department. A stock register and an issue register are maintained to ensure the proper handling of the sports items. Stock verification of the sports items is conducted at the beginning of each semester. Regular maintenance of the play area is conducted under the supervision of Physical education director and faculty sports coordinator.

Class Room Maintenance

At the beginning of each semester the readiness of the classrooms and labs are checked by the facility management team. Regular inspection, maintenance of the furniture's and classroom equipments is done on a regular basis.

IT Maintenance

The campus has optical fiber backbone for inter-connectivity between buildings and each building have their LAN. The computer center is also utilized for online exams, aptitude tests, and other competitive exams. The server room is headed by the Network Administrator, who also looks after institutes networking facilities and computer maintenance. IT help desk is functioning in the campus for resolving the issues like hard ware trouble shooting, software installation, Maintaining Biometric devices and network related issues are monitored and maintained. The complaints are posted through E-mail are addressed and resolved immediately.

Library maintenance

There is regular stock verification process carried out by the library. A file is maintained which contains the stock verification reports carried out at different intervals. Physical verification of the library stock is the process by which the accession register is tallied with the books in the library. It gives the overall picture of the available documents in the library. Stock verification provides opportunities to weed out long unused, very old editions of the books from the library.

Laboratory Maintenance

All the laboratories are spacious and well-lit. Do's and Don'ts/safety precautions are displayed in each laboratory. Every equipment in the lab is bar-coded and records of the same are maintained. All necessary software like Microsoft office, browser, lab software, antivirus software are installed and maintained. IT HELP DESK, of MREC maintains the computers. Periodical maintenance is carried out in all Laboratories

Electrical maintenance:

Power supply and Electrical maintenance is maintained by Electrical and Electronics Engineering Department supported by electrician's team for providing reliable electrical power to the college. The power is supplied by the TSSPDCL with a maximum demand of 500KVA. Diesel Generators which is capable of providing power back-up of 100KVA initially, has gradually upgraded to 410 KVA(250KVA+160 KVA).UPS back up of 7 KVA is made available for Exam Branch and 20 KVA for Server room. Solar power plant of 413 KWP capacities is available and is maintained meticulously by technical team. 3 GENERATORS: Set capacity: 90 KVA / 250 KVA / 125 KVA

Standard Operating Procedures for all Infrastructure Maintenance Committees.

- 1.SOP for Building Maintenance Committee
- 2.SOP for Transport Maintenance Committee
- 3.SOP for Equipment Maintenance Committee
- 4.SOP for Computers and Networking Maintenance Committee

5.SOP for Electrical Maintenance Committee

6.SOP for Library

7.SOP for Sports Complex

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

5.Student Support and Progression

5.1 Student Support

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

Answer: 50.58

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
2163	2268	2249	2245	2268

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution and non-government agencies during the last five years

Answer: 1.82

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
81	95	105	70	50

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Institutional data in prescribed format	View Document

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability

1. Soft skills

2. Language and communication skills

3. Life skills (Yoga, physical fitness, health and hygiene)

4. Awareness of trends in technology

Answer: A. All of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations offered by the Institution during the last five years.

Answer: 100

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
4379	4355	4457	4419	4521

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies**
- 2. Organisation wide awareness and undertakings on policies with zero tolerance**
- 3. Mechanisms for submission of online/offline students' grievances**
- 4. Timely redressal of the grievances through appropriate committees**

Answer: A. All of the above

File Description	Document
Upload any additional information	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

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

Answer: 62.23

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
770	787	824	731	506

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

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

Answer: 11.54

5.2.2.1 Number of outgoing student progressing to higher education.

Answer: 125

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

5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Answer: 100

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
74	27	38	21	10

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
74	27	38	21	10

File Description	Document
Upload supporting data for student/alumni	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

5.3 Student Participation and Activities**5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.**

Answer: 379

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
92	79	61	119	28

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

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

Answer:

Student Association Council (SAC):

The SAC was established in the year 2017 to encourage the student success in extracurricular, educational and entertainment activities through various events and clubs. Malla Reddy Engineering College has a strong tradition of student clubs, hosting number of techno, cultural and literary events. The Council meets regularly to discuss issues pertaining to students on campus and develop through events, services, and advocacy-related initiatives, student programs which hold various meetings, including networking events, and other informational sessions. Student club brings out the passion in youngsters and develop their organizational skills. The clubs bring about a good balance of work, fun and leisure activities and ensure the all round development of students. There are several clubs that students can be a member of, in order to be part of the cultural landscape of the college.

Vision:

To enhance the overall educational experience of students through development of, exposure to, and participation in social, cultural, multicultural, intellectual, recreational, traditional, and campus governance programs.

Mission:

Our mission is to encourage the student success in extracurricular, educational and entertainment activities through various events and clubs.

Goals :

- To represent the student community as an active member in techno, cultural and literary events
- To promote student success through teamwork and involvement.
- To provide a unique student experience.

The SAC Consists of the following Clubs:

- **Literary Club**
- **Technical Club**
- **Fine Arts Club**
- **Music Club**
- **Sports Club**
- **Dance Club**
- **Social Service Club-Street Cause**

Composition SAC:

1. Head of the Institution as a Chairman, Dean 1st Year as Convener and faculty advisor for each club.
2. One final year(undergraduate) student representative of each department/advanced learner
3. One PG student from each Specialisation..

Selection/Eligibility Criteria for SAC Members:

- 1. Undergraduate student aged between 18-22 years and for masters-level the maximum age limit is 25 years for getting selected to the student council.
- 2. The candidate shall not have any criminal cases or disciplinary action taken by the disciplinary committee of college..
- 3. The candidate must be regular and full time and they should also not have any dues of hostel/Institution fees in the institution.

Roles and Responsibilities:

1. Prevention of ragging is the top priority in the instruction and prevention of ragging through counseling of the senior students with the help of faculty members.
2. Govern the junior and the needy students to improve their technical and organizational developments through symposiums, workshops, and seminars.
3. Accompany with administration and faculty for the smooth functioning of various works.
4. Directorship of Annual sports day, cultural and technical fest.
5. Tie up with various social organizations like NSS, Street Cause and other clubs.
6. All the programmes to be presented in front of the Council meeting and should get approval.

- Other student representatives are members in the following Academic and Administrative Committees:

Ø IQAC

Ø Class Review Committee

Ø Library Committee

Ø Canteen Committee

Ø Hostel Committee

Ø Women Empowerment Cell

Ø SC/ST Cell

Ø Cultural Committee

Ø Sports Committee

Ø Publications Committee

Ø NSS Committee

Ø Anti-Raging committee

Ø Training & Placement Committee

Ø Grievance Redressal Committee.

File Description	Document
Upload any additional information	View Document
Paste link for Additional Information	View Document

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Answer: 32.6

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
37	43	34	27	22

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Number of sports and cultural events / competitions organised per year	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Answer:

Malla Reddy Engineering College (MREC) alumni association is a registered body with registration number 778 of 2008 under CMR educational Society. All graduated students become members of alumni association. The members of the alumni association have regular interaction with the management, Principal, faculties and staff members regarding the overall development of the institution. The Alumni association committee is formed every three years in Alumni meet and holds two executive committee meetings on an average every year and future plans are discussed.

The main objective of the Association is to bridge the gap between the college and alumni. Annual Alumni meet is held in the month of JUNE/JULY every year. Alumni meet is a formal function which consists of Registration, inauguration, games, formation of alumni association, alumni interaction with students, cultural programs by present batch of students followed by lunch.

Vision

To guide and assist alumni in pursuits that are useful to society and to their personal and professional advancement in an ambience of creativity, innovation and ethics

Mission

To nurture students' sense of belonging and community by enabling them to participate in annual events and reunions.

To create a platform that disseminates relevant information about emerging areas of study and research.

To utilize the expertise and the service of the alumni in the overall development of the institution.

The activities and contributions of alumni association are as follows:

Alumni contribution for development of institution through non-financial means:

Role in academic activities:

- Alumni are Members in Board of studies of each department and IQAC
- Alumni will acts as a Resource persons for Guest Lectures and seminars.
- Alumni will Conduct mock personal interviews.
- They will Discuss business and entrepreneurship opportunities.
- The Alumni offers job oriented training.
- The Alumni those who are entrepreneurs arranges industrial visits to the students and provide inputs on how to start a new venture to turning them in to job providers.
- The Alumni guide the students about career opportunities in different fields.
- Alumni share their professional experiences with students.
- The Alumni visit campus at regular intervals to assist the new student batch in scheduling and coordinating activities, providing support and guidance to various student clubs.
- The Alumni extend their support in campus placements and summer and winter internship programmes.
- Some of the Alumni are employed as faculty in the college. They play an important role in academic and institutional development.

Role in Social responsibility:

- The Alumni participate in blood donation camps organized in the college every year.
- The Alumni participate in swatch bharat organized by the college.
- The Alumni help in arranging the NSS extension activities.
- The Alumni organize Practical Sessions on meditation for the students.
- The Alumni motivate the students to follow their path for the betterment of society.

Alumni contribution for the development of the Institution through financial means:

- Each alumnus contributes Rs.100/- towards membership of Alumni association..
- The alumni also contribute to Institute towards development apart from Membership Fee.
- The Alumni has contributed Rs. 15.05 lakh to the Institution in the last 5 years

File Description	Document
Any additional information	View Document
Link for additional information	View Document

5.4.2 Alumni financial contribution during the last five years (in INR).

Answer: A. ≥ 15 Lakhs

File Description	Document
Any additional information	View Document
Link for additional information	View Document

6. Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Answer:

The Vision of the Institution:

To be a premier center of professional education and research, offering quality programs in a socio-economic and ethical ambiance.

Malla Reddy Engineering College (MREC) believes in providing quality technical education coupled with strong fundamentals along with practical perspectives and global standards through which the students would enable to excel in their respective field of study. We also empower students to perform better at their workplace and become a better citizen.

The Mission of the Institution:

M1 - To impart the knowledge of advanced technologies using state-of-the-art infrastructural facilities.

M2 - To inculcate innovation and the best practices in education, training and research.

M3 - To meet the changing socio-economic needs in an ethical ambiance.

The Vision and the Mission of the institute have been updated to meet the policies and objectives of Higher Education effectively and to pursue academics and research with the global standards, socio-economic and ethical considerations.

Nature of the Governance

The Governance and Leadership of Malla Reddy Engineering College ensures that its Higher Education operations are functioning well by nurturing the Decentralization and Participative decision-making process as the key factors. The Principal convenes the meetings of the Academic Council, Finance Committee, IQAC, and Selection Committees. He also oversees admissions of students, recruitment of faculty, program curriculum and regulations, student feedback, internal and external assessment, research and consultancy activities, placements, financial implication, course contents, co-curricular and extra-curricular activities, etc through respective Deans. Periodic meetings with all Heads of the departments will be held to discuss academic and co-curricular activities at institutional level.

The governing body provides guidelines through the academic council to maintain high standards in imparting education by setting the objectives relevant to the policy, hiring quality professionals, rewarding the achievers, designing curriculum, providing infrastructure facilities and encouraging the best utilization of the resources. Students and Alumni are also involved in certain committees including the IQAC so that their views are also considered in governance.

The decentralized mechanism exists not only at the higher level but also at the department levels. Decisions at department levels are taken by well-structured committees like Board of Studies (BOS), Department Academic Committee (DAC), Program Assessment Committee (PAC), Department Development Committee (DDC) and Course Monitoring Committee (CMC).

Perspective Plans

Malla Reddy Engineering College focuses on its Perspective Plans for the upcoming academic years based on quality in higher education. Accordingly, the decision-making process and quality planning are articulated keeping the given Vision and Mission. The principal and the faculty together design calendar activities and the apex management monitor its implementation by providing the necessary support.

Participation of Teachers

Teachers play a major role in the decision-making, planning, implementation of the academics and administrative functions through various statutory and non-statutory committees of MREC.

IQAC collects faculty insights from these committees while making strategic academic planning as the teacher is the key executor of it. The teacher also holds responsibility for examining and assessing the students in a transparent way and in time adhering to regulation

File Description	Document
Any additional information	View Document
Link for additional information	View Document

6.1.2 The effective leadership is reflected in various institutional practices such as decentralization and participative management.

Answer:

Decentralization and Participative Management:

The institution has a decentralized and institutionalized transparent mechanism in management, administration, financial and academic affairs. This mechanism delegates appropriate responsibilities from the top-level management to the down level and liberates the top management to focus on policymaking and major decisions.

The Governing Council is the highest decision-making body that formulates/ amends rules and regulations, delegates powers and responsibilities to various committees, principal, Deans, Heads of the Departments (HoDs) and heads of the sections.

All the stakeholders of the institution have participative roles in various decision-making committees. External stakeholders like Statutory body Nominees, State government Nominees, University Nominees, Industry experts, Employees, Educationists, Scientists occupy 20% of all the committee members. Faculty occupies 60% and Students, Alumni occupies 10% of the committee members. The remaining 10% of the committee members include Management.

Case Study of preparation of Academic Calendar and Exams

An academic calendar helps to keep students, faculty, and staff reminded of important dates throughout the academic semester and year. It can be useful for prospective students, alumni, and parents as well.

An academic calendar varies from one autonomous institution to other. Typically, the academic year has been divided into two 18-week semesters that is, on an average consist of 180 days of instruction. In semester system the academic year is divided into two semesters for engineering streams and three semesters for management studies. The semester concludes with final examinations.

The Academic Calendar is printed at the end of the preceding academic year with the regulations. The Principal organizes a meeting with the Deans, Heads, Controller of Examinations, and Training & Placement Officer. The head of the institution is the final authority to accommodate everything in one semester.

The academic calendar comprises of commencement of the day of a particular semester, a spell of instruction to complete the syllabus, mid exam schedule, parent - teacher meeting, preparation holidays, end exam schedules, vacation schedule and commencement of next semester class work.

Examination time tables are prepared by the Controller of Examinations for regular and supplementary exams of each semester and finalized by the head of the institution. Approved time tables are published on the website and on the notice board for easy access. Students pay the examination fee and plan their exams accordingly. There is a pre-moderation of the course on the same day of the particular scheduled external examination. The course coordinator will check Bloom's level and standard of the paper and provide necessary inputs to the controller of the Examinations. After completion of the exam, the evaluation is also done from the next day onwards by other premier institutions' subject faculty. From the completion of the last exam date, the controller of the examination declares the results within 20 days through the proper channel

File Description	Document
Any additional information	View Document
Link for strategic plan and deployment documents on the website	View Document
Link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Answer:

Malla Reddy Engineering College prepares and deploys the strategic plan effectively 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 Strategic Plan was drafted for the period 2016 to 2021 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.
- To get **Quacquarelli Symonds (QS)** International Ranking (Specializing in the analysis of

higher education institutions around the world)

Short Term Goals (Annual 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 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.

Activity successfully implemented based on the strategic plan

Starting of the New Programs in emerging technologies

To start new UG/PG Programs in emerging technologies so as to improve the employability prospects among the students, Malla Reddy Engineering College applied for new programmes under UG and PG as per Clause 2.15.3 of AICTE Process Handbook (APH) 2020-21. AICTE has approved the new programmes to initiate at MREC on 15-06-2020, the parent university JNTUH also granted affiliation to the following new programmes under UG (CSE) and PG (ECE) along with existing programmes for the academic year 2020-21.

- Four Under Graduate (UG) program under the department of Computer Science and Engineering (CSE)

- One Post Graduate (PG) program under Electronics and Communication Engineering (ECE)

The following are the new programs sanctioned by AICTE and JNTU Hyderabad.

Sl. No	Program Level	Department	Programme Name	Intake
1	UG	CSE	Artificial Intelligence and Machine Learning (AI&ML)	60
2	UG	CSE	Cyber Security (CS)	60
3	UG	CSE	Internet of Things (IoT)	60
4	UG	CSE	Data Science (DS)	60
5	PG	ECE	VLSI and Embedded Systems (VLSI&ES)	30

File Description	Document
Any additional information	View Document
Link for additional information	View Document
Link for Strategic Plan and deployment documents on the website	View Document

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

Answer:

Malla Reddy Engineering College has a clearly defined organizational hierarchy and structure to support decision-making process which is clear and consistent with its purposes and supports effective decision making.

Governing Body consists of Academic Council/Director/Principal/Deans/ HoDs and Senior Faculty Members. The body meets once in a semester in general and it may meet any time in response to exigencies. Decisions like the introduction to a new course, closure of the existing courses, construction of new blocks, enhancement of physical facilities and other initiatives for improvement of the MREC are taken in the form of society resolutions in the Governing Body meet.

The administrative setup of the institution is visible as per the Organogram chart of the organization. The Governing Body is the ultimate authority which has the Director/Principal as the academic and administrative head of the institution. Internal Quality Assurance Cell (IQAC) monitors functioning of the statutory and non-statutory committees. Deans, IQAC, Administrative officer, Controller of Examinations and other section heads like Training & Placement, Industry Institute Interaction cell, Entrepreneur Development Cell, etc. shall report to Head of the Institution. Staff report to the respective Section heads.

Service rules have been formulated as per the guidelines of authorities like affiliating university and approval body (JNTUH and AICTE/ UGC).

Service rules, Procedures, Recruitment and Promotional Policies:

Malla Reddy Engineering College has a set of well-established rules, policies and regulations formulated within the framework of AICTE, state govt. and the affiliating university and are approved by the Governing Council of the institute. The rules and regulations of the institute are revised periodically. The following documents are published and are made available on the institute website https://mrec.ac.in/About_SRR/SRR.pdf and in all the departments to create awareness among the employees and students.

Service Rules and Procedures:

Service rules and procedures for the Institution are in place and are well-documented. They are made known to all the newly recruited staff members through an Induction program. The recruitment and the Scales of pay for various teaching positions are as per AICTE guidelines.

Recruitment Policies:

The process of recruitment includes:

- Invitations of application (Newspaper advertisement, through references, etc.).
- Preliminary assessment of the candidates (Review of resume received).

- Invitation to the applicants for a campus visit to attend the interview.
- Assessment by the Selection Committee and recommendation to the Management.
- The Final decision on the recruitment is taken by the Management.

Promotional Policies:

- All promotions are made by the Selection Committee only.
- Eligible candidates shall be considered for promotion on the recommendation of the Selection Committee.
- Number of posts at various levels in each discipline shall be as deemed necessary by the college authorities.

The copies of the institute's Administrative Manual containing service rules, procedures, recruitment and promotion policies are circulated among all the staff (both teaching and non-teaching) for their information.

File Description	Document
Any additional information	View Document
Link for additional information	View Document
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

Answer: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
Institutional data in prescribed format	View Document
ERP (Enterprise Resource Planning) Document	View Document
Any additional information	View Document
Link for additional information	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff and avenues for career development/ progression

Answer:

The institute formulates and effectively implements welfare measures for teaching and non-teaching staff. All statutory measures are implemented. Various monetary, non-monetary measures towards personal and professional growth are followed to the satisfaction of the employees.

- Employees are covered under EPF and Gratuity.
- Study, maternity and medical leaves are sanctioned to the required staff.
- Financial assistance is offered for pursuing higher studies.
- Personal loans are provided to both teaching and non-teaching faculty.
- Leaves are provided as per norms.
- 100% Registration fees, dearness allowance, travel grants are given for faculty attending conferences and workshops.
- Incentives for research work like honorarium for publications of Papers, Patents, Book, Book chapters and NPTEL are provided.
- Greeting card along with 400 rupees is given to teaching and non-teaching staff on their birthday occasion.
- Celebrating festivals through Faculty club.
- Group Insurance for all staff.
- All the staff is provided with two early or late permission facilities.
- Free transport and medical facilities are provided to all the staff.
- WI-FI enabled campus is provided to all.
- Full-time medical facilities with qualified doctors and nurses are made available in the institution.
- Sports, Gym and yoga facilities are provided to staff.
- ICICI bank and ATM facilities are made available in the campus for all the staff.
- Daycare center is provided to the required staff children.
- Summer vacation is provided to all the staff.
- Delicious food is provided to all staff with subsidized rates.

Amount spent on the welfare measures for teaching and non-teaching staff shown below:

Year	2019-20	2018-19	2017-18	2016-17	2015-16
Amount Spent in Rs	27,02,346/-	29,09,141/-	27,70,610/-	13,44,439/-	18,23,644/-

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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

Answer: 62.12

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
180	222	211	223	191

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

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

Answer: 31.8

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
29	36	37	33	24

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Answer: 89.62

6.3.4.1 Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
318	300	286	310	265

File Description	Document
IQAC report summary	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Answer:

The institute conducts regular financial audits by a certified & recognized CA, MRK & Co., Hyderabad through CMR Educational Society. Internal audits are also performed by the Management/ Principal /IQAC. The institute ensures that financial audits are done on all the aspects of financial functioning of the institute in a systematic procedure, following the financial policies and procedures. Final audit reports will be approved and ratified by the institution Governing Body. The Finance committee headed by Principal conducts a periodic internal finance audit for verification and validation of payments, receipts, cash books and ledgers for compliance.

The institute engages a reputed firm / agency for conducting external audit, usually once in a financial year. The audits are duly approved by authorized officials. This way the audits ensure that all the functions are carried out in the strict interest of the institute and are directed towards the prosperity and development of the institute. Copy of final audit report is brought to the knowledge of the concerned officials to rectify any inaccuracies and inconsistencies occurred in their working. All the accounts are monitored on regular basis internally by Accounts department head.

Financial planning ensures consistency of goals, aligning the growth objectives of the institute with its financial requirements. It also supports the strategic growth of the organization. To begin with the end in mind, the institute plans and accumulates the right amount of funds by gathering the inputs and requirements from its associated departments.

Financial Planning is exercised well in advance for the organization and efficient Budgeting & Controlled mechanism involving the various academic departments and administrative sections of the institute. Financial planning and review are done in periodic intervals through statutory - finance committee headed by Principal, Dean-Administration, Management representative, Faculty and Account Personnel as members.

Finance Committee meets 2 to 4 times a year and reviews the income-expenditure statements and suggests a further action plan. Management through Governing Council looks into income and expenditure pattern and pragmatic recommendations are given.

A well-structured financial section is in place and every financial transaction is recorded through software. Financial rules are placed on the institute website. Fee payment is encouraged through online mode. A flexible financial system is implemented, which allows spending beyond the budget allocation as per the approved budget for the benefit of demands and requirements. Optimal utilization and execution of the budget is monitored through internal and external auditing. Internal audit is conducted quarterly and the statutory external audit is conducted annually by the chartered accountants.

All government scholarships and funds received from the government as grants are audited separately by the auditor appointed by the government. Audited financial statements are made public by placing them on the institute website and are sent to the statutory and regulatory bodies.

An effective financial management system is in place and helps the institution in overall growth.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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

Answer: 26.96

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
12.77	8.035	3	1.65	1.5

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

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

Answer:

The Telangana government regulates fees to be collected from the students through Telangana Admission and Fee Regulatory Committee (TAFRC). The fee collected from the students generates most of the funds needed to run the Institution. Long-term loans required, if any, for capital expenditure or working capital finance are obtained from a panel of external agencies. The procurement and deployment of the funds is taken care of by one of the managing committee members appointed by the Institution.

The tuition fee fixed for the college depends on the infrastructure available, the strength of the faculty and sanctioned student's strength. The TAFRC takes the data from respective colleges every year and inspects to finalize the student's fee for undergraduate (UG) and postgraduate (PG) courses.

Malla Reddy Engineering College mobilizes funds through the following:

1. Tuition fee
2. Affiliated University fee
3. Transport fee
4. Admission fee
5. NBA Fee
6. Examination Fee
7. Hostel fee
8. Funds from government, non-government and individuals
9. Conduction of various examinations of government/private organizations or agencies.
10. Alumni contribution

Strategies for optimal utilization of financial resources:

Well established procedures are in place for the effective utilization of resources to achieve the short-term and long-term goals of the institution in line with the strategic plan. Planning for the utilization of funds starts from section in charges presenting their annual budget proposals keeping in view development and updating of laboratories, computing facilities, library, teaching-learning process, training, extension activities for the coming academic year before Heads of Department. After the deliberations at the department level, HODs forward the budget requirements to the Institute Finance committee.

Institute Finance committee collects the individual budget estimations from all the departments and prepares the institute budget. The Committee deliberates and makes necessary changes for a proper balance of receipts and expenditure. It also reviews the income and expenditure made in the previous year. The same is submitted to Governing Body for approval. The Governing Body reviews the budget estimates and discusses the future planning as per strategic plan and approves the budget.

The Finance committee communicates the approved budget to the departments. The committee continuously monitor the utilization of the approved budget throughout the academic year. In any unforeseen circumstances, non-budgeted amount is considered and allotted depending on the merit of the case by taking the appropriate approvals from the authorities. For the utilization of budget financial powers are delegated at various designations as per the norms.

At the end of the financial year all the income expenditure statements in line with the approved budget are audited by a chartered accountant. The audited reports are placed before the governing body for final approval.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle)

Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Answer:

Continuous incremental improvement is an ongoing effort at Malla Reddy Engineering College to improve the system and teaching-learning process. Internal Quality Assurance Cell (IQAC) evolves mechanism and procedure for the improvement of academics on the following parameters.

1. Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks. IQAC
2. Balancing the relevance and quality of academics and research programmes.
3. Optimizing and integrating the modern methods of teaching and learning.
4. Establishing the credibility of evaluation procedures.
5. Ensuring the adequacy, maintenance and proper allocation of support structure and services.
6. Sharing the research findings.
7. Improving the admission quality.
8. Maintaining the student profile.
9. Enhancing the placement quality.
10. Encouraging higher studies.
11. Producing the feedback analysis.
12. Providing the result analysis.
13. Motivating students' participation in guest lecture/seminars/workshops.
14. Digitalizing the day to day attendance monitoring.
15. Fostering the success rate (pass out graduates).
16. Orienting in competitive exams.
17. Acknowledging the students' performance through awards and recognitions.
18. Maintaining the distinguished alumni profile.
19. Enriching the faculty quality.
20. Retaining the dynamic faculty
21. Keeping the faculty average age group.
22. Enhancing the quality of research publications.
23. Facilitating the consultancy projects.
24. Cascading the research projects.
25. Organizing workshops/seminars/FDPs/conferences.
26. Encouraging the faculty participation in workshops/seminars/FDP/conferences.
27. Galvanizing the patents applied/awarded.
28. Strengthening the books published/reviewed/edited.
29. Acknowledging the faculty with awards and recognitions.
30. Applying for the faculty guiding in Ph.D.
31. Augmenting the number of collaborations.
32. Increasing class room quality.
33. Extending the seminar hall.
34. Improving the hostel quality.
35. Refining teaching-learning methods; aiming at blended and flipped classroom.
36. Digitalizing the conduct of examinations and evaluation.
37. Mentoring system to be improvised and recorded for the entirety of the course

Major incremental improvements during the preceding five years are: -

Establishment of Centers:

- Research & Development
- Centre of Excellence
- Incubation Centre
- Intellectual Property Rights Cell
- Overseas Education Cell
- Industry Institution Interaction Cell
- Career Guidance Cell
- Training & Placement Cell
- Entrepreneurship Development Cell (EDC)

Other improvements:

- Introduction to new five UG and two PG courses
- Memorandum of Understandings (MOU's)
- Usage of solar energy, Green auditing and Water harvesting
- Internet Access and Wi-Fi Connectivity throughout the campus

- Examinations Reforms
- Value Added Courses
- Smart TVs with public address system
- Assisted Collaborative Teaching (ACT)
- Course Monitoring Committee (CMC)

- Student Association Council (SAC)
- Infrastructure facilities improvements like Major auditorium, Principal's Chamber, Canteen
- Record of meetings and minutes from committees

Post accreditation quality initiatives

- MREC Academics Software
- Digital Evaluation
- CCTV installation

File Description	Document
Any additional information	View Document
Link for additional information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

(For first cycle - Incremental improvements made for the preceding five years with regard to quality

For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Answer:

IQAC of the institute reviews the assessment of teaching-learning outcomes through the following:

1. The end of the course survey is collected every semester for each subject.
2. Course outcome analysis is done for each course after completion of the semester, incorporating the input collected from the course and the course end survey.
3. Result analysis is done every semester.
4. Program assessment is done for the graduating batch. The learning outcomes and the Program (POs) are assessed through curricular and co-curricular activities.

All the suggested changes in the curriculum by the departments and their BOS are put forth to the academic council for approval.

OUTCOMES

1. Exit survey has helped in revising the curriculum according to the needs of the present day.
2. Alumni feedback has helped in the refinement of the curriculum.
3. The inclusion of value-added courses, training programs has led to better placements.
4. The revised curriculum has enabled the students to gain admission into premier institutions.
5. All eligible UG & PG Programs are NBA accredited.
6. Five years of Autonomous status is granted by UGC up to 2024-25 academic year

Examples of Institution Reviews

ASSISTED COLLABORATIVE TEACHING (ACT) HOURS

Malla Reddy Engineering College implements a unique system known as 'ACT Hours' to consolidate students' understanding of the lessons and also to cater the needs of the academically slow learners.

- The concerned subject faculty member conducts the ACT hours with the help of a colleague.
- The subject faculty and support faculty together discuss and plan the program based on the interaction with the students before the ACT hours begin.
- The main faculty member and the support faculty member shall interact with two groups of students of the respective class to estimate the level of the students.
- They prepare few questions on the three standards viz., low, medium, and high from each unit of the subject in advance.
- Students are asked to refresh a subject area/concept on few questions and answers in a given slot.
- All the students who are capable of writing the answers and solving the problems shall start the examination while the other students shall be made into a separate group.
- Then those students who cannot take the exam immediately are given another few minutes' time to understand the concept and to practice the solutions. Once these students feel confident, they also start writing the exam.

- Those who complete the test first are given again a set of challenging questions or problems to engage them productively.
- The second category students who complete the exam after the first are given more problems on a little higher level to raise their standard.
- The last group of students who fail to attempt all the questions are scrutinized to understand the areas of lagging. They will be taken care by explaining the concepts again and practice for 20 minutes.
- Then those students are tested again on the basic concepts and once they attain the basic concepts, they will be raised to the next level and placed along with the mediocre level students subsequently.
- After the test, solutions are also provided and make the students discuss them on the same day. They will be given 15 minutes to clarify all their doubts.
- Extra-ordinary students will have the chance of practicing more problems which can be at the creative level; mediocre students will have the chance of practicing the problems at the analytical level, while the poor students will be raised to the apply level of Bloom's Taxonomy.
- This process helps all categories of students to rise from the basic to intermediate to extra-ordinary level.
- There can be incremental growth observed over time.

ACT hours program provides contention to all the stakeholders of the teaching-learning system

COURSE MONITORING COMMITTEE (CMC) MEETINGS

The institute conducts Course Monitoring Committee (CMC) Meetings every fortnight to review the completion of the syllabus and facilities required for the students to improve the academic program. This committee consists of HOD, class teacher, subject teacher concerned students chosen from the class who are the toppers, CRs and two more random numbers. The members of the committee discuss the completion of the syllabus, improvements of infrastructure facilities, experiments completed in the laboratories, faculty and students' feedback on prevailing conditions and the improvement areas to be identified.

In a typical setting of CMC meetings, HOD asks the students about the syllabus completion and issues, if any, in the teaching-learning process, and about the facilities which facilitate or impede the teaching-learning process. While the HOD interaction is taking place, the class in charge notes down the information on the template prepared in advance. In the meeting, students are at liberty to speak and share their views openly and the student feedback on all aspects are obtained without any bias.

The CMC meetings of all the courses are consolidated and a plan of action is developed and implemented to address the gaps and issues identified. The resultant actions could be the change of faculty member, modulation of the voice of the concerned subject teacher, accelerating or slowing down the syllabus completion, deployment of the equipment in the laboratory in case of insufficiency, technical facilities like LCD projector, any motivational sessions if required exclusively, etc.

The possible actions are taken in the order of the priority and the maximum time taken to fix the problems is a week. Every measure of the action is well documented for future reference with the concerned department's head.

IQAC adopts best teaching practices for the effective teaching-learning function of the academics. To mention a few PROJECT BASED LEARNING, CRT Training, Choice Based Credit System (CBCS) curriculum, PEDAGOGY TRAINING PROGRAMME are carried out during the period 2014-2019.

The outcome of Project Based Learning has become obvious in students' ability to think pragmatically as it focuses on 'learn while doing'. CRT Training resulted in higher placements; Choice Based Credit System curriculum facilitated the students to add value to their learning, Pedagogy Training program became scaffolding in students' learning progress and reflected in incremental pass percentage.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
2. Collaborative quality initiatives with other institution(s)
3. Participation in NIRF
4. Any other quality audit recognized by state, national or international agencies (ISO Certification)

Answer: All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Paste web link of Annual reports of Institution	View Document

7. Institutional Values and Best Practices**7.1 Institutional Values and Social Responsibilities****7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.****Answer:**

A Women's Protection cell constituted by women faculty members from various departments, headed by a senior women faculty member handles the safety and security issues of both girl students and women faculty members. The members of the cell regularly interact with both the target groups to find out the problems faced by them if any and to try to sort out those issues in an amicable manner. Also, the members of the cell involve in giving psychological, academic and career counselling to the girl students. Grievance redressal cell also involves in few issues of concern. Girl students need a private, confidential and comfortable place to take rest at times, owing to their personal health conditions. Common room facility available in each of all the departments helps the girl students in this regard. With an intention to educate the current generation regarding the demographic consequences of declining gender ratio, consequences of gender discrimination, the significance of world of equals and other gender related issues a mandatory and audit course called 'Gender sensitization' is introduced to the students of all departments. While the syllabus is taught by the in-house faculty, few invited talks are arranged by the resource persons from the fields of political science, Sociology etc.

The institute identifies and recognizes the talented female faculty members and honours them with the posts like Head of the department, various event coordinators etc. Various occasions are celebrated at the institute level like International Women's day, Bathukamma festival (local floral festival), Kaartheeka vana samaaraadhana (local social gathering festival), Sankranthi samburalu Krishnashtami, Christmas celebrations etc to bring out the wide spectrum of talents in the women faculty besides teaching.

Women who are successful in their own fields and who can inspire the women faculty and the girl students are invited as Guests of honour for International Women's day celebrations. Few of such motivating personalities who visited our campus are Ms. Deepika Chalasani, Co founder Fit4life, Dr. N. Aparna, Scientist, NRSC, ISRO, member of prestigious Mission Mars, Ms Sujatha, Anchor in the popular news channel TV9 etc. One word worth mentioning about Ms. Sujatha is that in spite of being 90% paralyzed in a major accident she still happens to be much sought-after anchor in TV9.

Bathukamma festival is a traditional floral festival celebrated in the state of Telangana. Bathukamma made of seasonal flowers resembles a temple tower. A lump of turmeric is placed on the top of the floral tower. Young girls and women decorate their bathukamma and place all of them at a common point. Then all the girls and women gather around these decorated bathukammas, sing and dance the native folk songs as a part of Bathukamma celebrations. Similarly, the other occasions mentioned above give due importance to the women faculty and girl students in planning, organizing and celebrating those occasions. The institute is putting its untiring efforts in encouraging women in particular girl students to transform themselves into a complete woman.

File Description	Document
Specific facilities provided for women in terms of: a.Safety and security b.Counselling c.Common Rooms d. Day care center for young children e. Any other relevant information	View Document
Annual gender sensitization action plan	View Document

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

Answer: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system

- **Hazardous chemicals and radioactive waste management**

Answer:

Malla Reddy Engineering College (MREC) is committed to implement an eco-friendly campus. It has taken a variety of measures to minimise its environmental effects. The institute maintains the green atmosphere with the help of a dedicated team of gardeners and sweepers who look after the lawns, gardens, and plantings. The Institute has completed a Green Audit and is working to put the findings into practise.

Solid Waste Management:

MREC has adopted the best possible steps for managing degradable and non-degradable waste. Management of degradable and non-degradable waste refers to the collection, proper treatment, and safe disposal. Risk and threats associated with waste disposal can be easily evaded by the knowledge on forms of wastes.

Dust bins are provided all across the campus to collect the garbage. Then this garbage is segregated to dry and wet waste, treated properly and dumped at the designated location to get the compost prepared. This compost is fed to the plants in the campus.

Liquid Waste Management:

The campus's liquid waste is discharged into an underground drainage system that is connected to a water treatment area. Septic tanks were attached to all waste water lines from toilets and bathrooms. Sewage water from various buildings is collected and filtered properly to remove any kind of solid waste. Then this water is treated to remove odour. Finally, this water is treated with proper and safe disinfectants and used for Gardening thereby saving thousands of litres of fresh ground water.

E - Waste Management:

System upgrading is a continuous process in the institute. In this process considerable amount of E - waste is generated. The concerned lab technicians thoroughly check the system before disposing it off and separate the components which can be used in the future. Finally, the components which are in no way useful either to that laboratory / department or to any other laboratory / department are disposed. Third party vendors are invited to the institute to collect and dispose E-Waste in a safe and environmental friendly manner.

Biomedical Waste Management:

The various disciplines offered by the institute do not generate any bio medical waste. The bio medical waste such as sanitary napkins was collected by third party every month for safe disposal.

Waste Recycle System:

Waste paper is another potential source of solid waste - stationery used by the students like assignment booklets, records etc, newspapers in the library etc. This waste paper is collected from all the departments and handed over to the third-party vendors at the end of each semester who in turn hands over this waste to paper recycling industries. Automation at all possible levels is being done to reduce the paper consumption.

Hazardous Chemicals and Radioactive Materials:

The departments in the institute does not use hazardous chemicals and Radioactive materials. The Chemicals which are used in the first year laboratories are of non hazardous chemicals.

Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Geotagged photographs of the facilities	View Document
Any other relevant information	View Document

7.1.4 Water conservation facilities available in the Institution:

1. Rain water harvesting
2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Waste water recycling
5. Maintenance of water bodies and distribution system in the campus

Answer: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any additional information	View Document

7.1.5 Green campus initiatives include:

1. Restricted entry of automobiles
2. Use of Bicycles/ Battery powered vehicles
3. Pedestrian Friendly pathways
4. Ban on use of Plastic
5. landscaping with trees and plants

Answer: Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document

7.1.6 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

1. Green audit
2. Energy audit
3. Environment audit
4. Clean and green campus recognitions / awards
5. Beyond the campus environmental promotion activities

Answer: A. Any 4 or all of the above

File Description	Document
Certification by the auditing agency	View Document
Certificates of the awards received	View Document
Any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

1. Built environment with ramps/lifts for easy access to classrooms.
2. Disabled-friendly washrooms
3. Signage including tactile path, lights, display boards and signposts
4. Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment
5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

Answer: A. Any 4 or all of the above

File Description	Document

Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Answer:

As the institution is growing older the reputation of the institution reached far and wide across the nation, attracting students from various parts of India. In order to address various diversities among the students and to make the students aware of each other's tradition and culture an Ethnic day is celebrated every year where the students visit the campus in their regional traditional attire. With the help of the affiliating university JNTUH various youth exchange programmes were conducted. The institute hosted Haryana - Telangana youth exchange programme. On the next level, the institute hosted India - Srilanka Youth exchange. Our students participated in the Indo - Bangladesh Youth exchange programme organized at JNTUH.

Various activities are conducted to promote human and universal values like truth, love and peace, national values, communal and social harmony, etc. The Institution always strives to promote values and foster values in students. Raising a question about what kind of individuals we want our students to develop into, it puts forward the rationale that key value concerns in teenagers must be anchored in the framework of student's holistic development as a human being and as a responsible citizen of the society. We also promote value concerns to be rooted in contemporary contexts like environmental conservation, inter-faith harmony, gender equality, and appreciation for multiple identities, inclusivity, the increasing influence of science and technology, mass media etc. We also promote the development of qualities among students as globalization brings us all closer together and there is a need to live as a global community. We can do so only if we have global values that bind us together. The whole realm of activities and programs in our Institution can have a tremendous impact on the learning of values by students.

- MREC is always at the forefront of inviting diversity, enhance self-esteem, encourage students to have a voice and demand educational achievement.
- To achieve these objectives, courses like Constitution of India and three weeks Orientation Program are incorporated in the curriculum.
- Teachers deliver lectures with an acceptance and appreciation for different ideas, opinions, and learning styles of the students.
- Besides curriculum, communication and soft skills classes are conducted to make the students from different backgrounds communicate effectively.
- Women Protection cell and Grievance Redressal cell aim at social protection, ensuring tolerance and harmony, reducing vulnerability and empowering women and girls.
- During national festivals and other events of the college, eminent personalities are invited to emphasize the importance of tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities
- NSS activities of our institution mitigate the socioeconomic diversities and progress them towards leading to a tolerant and harmonious living.
- SAC, through various clubs educates the students and makes them aware of their social responsibilities. In cultural programs, traditions of various regions are respected.
- Students are involved and encouraged to participate in various co-curricular and extracurricular activities to make them mingle with one another and share their opinions and disagreements in a harmonious manner.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Any other relevant information	View Document

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Answer:

Introduction of Choice Based Credit System gave scope for including wide variety of subjects in the curriculum to groom a complete engineer. Subjects like Indian Constitution, Human Values and Professional Ethics, Law for Engineers help the students learn the fundamental rights and duties of citizen as prescribed by the Indian constitution, the ethics to be followed during their professional career and certain legal aspects related to their professional career. We introduced a compulsory paper on the Constitution of India at all engineering disciplines to create awareness and sensitizing the students and employees to constitution obligation . As a part of strengthening the democratic values. Rashtriya Ektha Diwas programme was organized 24th Jan 2020 for students and faculties at MREC-(A).

Institute undertakes different initiatives by organizing various activities to sensitize students and employees to the constitutional obligation: Values, Rights, Duties and responsibilities of the citizens. On 26th Nov 2019, Constitution day was celebrated at MREC-(A), Maisammaguda campus, Our Director Ramaswamy Reddy, narrated the fundamental rights, Duties, Values and responsibilities of citizens as stated in Constitution

of India. He appealed to all to remember the struggle of freedom and respect the National Flag and National Anthem. Our constitution provides for human dignity, equality, Social justice, Human rights and freedom, Rule of law, equity and respect and superiority of constitution in the national life .The whole country is governed on the basis of the rights and duties enshrined in the Constitution of India

Every year Republic day is celebrated on 26th Jan by organizing activities highlighting the importance of Indian Constitution. Similarly constitution day also would be celebrated on 26th Nov every year. Independence Day is also celebrated every year to highlight struggle of freedom and importance of Indian constitution.

We also conduct various activities to create awareness about cherishing and following the noble ideals which inspired our national struggle for freedom which the citizens of India must follow. We create awareness among the students' community about how Rights and duties play an important part in the development of a nation or the growth of an organization. Rights, on one hand, allow an individual an opportunity to be a part of the development process while duties, on the other hand, make an individual obliged to play a part in the development. As a citizen of a democratic country, we all are privileged to have some fundamental rights. But, apart from these rights we also have fundamental duties which we rarely talk about. Moreover, responsible citizenship is not just about enjoying the fundamental rights and performing the fundamental duties mentioned in our Constitution but it is about going beyond those duties. 'Good citizens are made not born' accordingly, helping children develop their full potential as citizens should be an important priority of families, communities and educational institutions. Every educational institution should educate students to become informed, rational citizens who contribute to society.

File Description	Document
• Details of activities that inculcate values; necessary to render students in to responsible citizens	View Document
Any other relevant information	View Document

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

1. The Code of Conduct is displayed on the website
2. There is a committee to monitor adherence to the Code of Conduct
3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
4. Annual awareness programmes on Code of Conduct are organized

Answer: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View Document
Code of ethics policy document	View Document
Any other relevant information	View Document

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Answer:

Malla Reddy Engineering College (MREC) organises events in the campus, which is of national and international importance like birth/death anniversaries of eminent personalities in remembrance of their great achievement / sacrifices to the world.

Right from childhood, Children's in India are part of every festival celebration in the house. This helps them understand the rituals of each festival and they develop a liking for the festivals and celebrations.

This celebration has two advantages:

1. the students get awareness on the significance of the event and its influence on the society.
2. the students develop organizational skills as the students play instrumental role in organizing various events.

For students, it is a great way to understand the rich heritage of India and learn about the importance of various festivals. These festivals also help students from across the world to know about India and its history. This creates a good reputation of our country in the world and we get an opportunity to spread our country's rich heritage.

The Management and Principal address the gatherings by sharing the importance of great freedom fighters namely Mahatma Gandhi, Nehru, Subash Chandra Bose and the Eminent persons like Dr.A.P.J Abdul Kalam the Peoples President birth anniversary which was celebrated as World

Students Day as declared by United Nations Organisation (UNO). He is not just a president, but he is a policy maker and an inspiration for young scientists, teachers and students. Dr.Sarvepalli Radhakrishnan, the second President of India who was an Academic Philosopher, diplomat, scholar and an ideal teacher. The teacher's community celebrates in a organised gathering to felicitate the teachers to encourage their achievement by conducting various events among teachers. On every 15th September Sir Mokshagundam Visvesvaraya's birthday is celebrated as Engineers Day as a remarkable tribute to the greatest Indian Engineer. On this special day, every department organises events and competitions among students to share their ideas by emphasizing on the engineering innovation.

Other various events conducted on regular basis in the institute are

1. National Youth day - Vivekananda Jayanthi
2. Republic day
3. National Science day
4. International Women's day
5. International day for Yoga
6. Independence Day
7. Sports day
8. Bathukamma celebrations - Telangana's floral festival
9. Engineers' day
10. World Students' day - Dr APJ Abdul Kalam birth anniversary
11. National Mathematics day

These are the few among the many occasions celebrated in the institute. Apart from these the institute celebrates 'Akshara' - the national level student techno cultural fest and 'Vishesh' - the Project expo for the students, every year to bring out the latent techno cultural talents in the students

File Description	Document
Geotagged photographs of some of the events	View Document
Any other relevant information	View Document
Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Answer:

Title of the Practice: Centre of Excellence – venue for Skill development

Objectives:

1. To attract and retain researchers and highly qualified personnel so as to prepare the future workforce.
2. To provide technological resources to support the research community.
3. To establish a competency centre for academia.
4. To produce future entrepreneurs who could sustain industry demands.
5. To provide interdisciplinary exchange and shared facilities and resources.

The Context:

Visionaries and giants from the Indian industrialists' fraternity like Anand Mahindra, Azeem Premji, Ratan Tata and many more stressed upon the most essential thing that is missing in Higher education institutes in the current scenario, i.e., Skill development among the graduates particularly the professional graduates like the engineering graduates. In tune with their opinions and with the vision that the MRECians should be industry ready by the time they get graduated, the institute started imparting training in various skill development training programmes and all such variety of training programmes are brought under one umbrella called the Centre of Excellence.

The Practice:

The Centre of Excellence strives hard to fill the gap between the student skill set and the industry requirements. This Centre hosts the following different specialized centres that offer a gamut of job-oriented courses that make the students industry ready. This link provides access to the information brochure (http://mrec.ac.in/NAACDocument/20210526184913-Centre%20of%20Excellence_Brochure.pdf).

1. Robotic Research Centre
2. Centre for Additive Manufacturing
3. Creative Computing Centre

4. Editing and animation
5. Dubbing theatre
6. Green matte studio
7. NI LabView
8. HFSS Communication design suite – Software Defined Radio (SDR) lab.

Nearly 30 different courses are offered across both the semesters in an academic year with 30 students enrolling per each course. Few popular courses among them are – Robotic process automation, Green matte studio – audio effects / Transitions, Python with Django, Foundations of blockchain etc. A sample video showcasing the visual effects is available in this link (<https://youtu.be/CM7dE7ZdPaE>). These value-added courses give hands on experience to the students. The duration of these courses ranges from 30 hours to as high as 56 hours in few cases. The dedicated team of faculty members identified looks after and monitors these training programmes. Experts from the industry are also invited based on the necessity to conduct the training programmes. The academic calendar for three academic years is available in this link (http://mrec.ac.in/NAACDocument/20210602221403-CoE_Academic%20calendars_2019-20,2018-19%20and%202017-18.pdf).

Evidence of Success:

- The impact of the Centre of excellence is evident in many ways. Around 300 students got paid internship opportunities through www.internshala.com with a stipend of as high as Rs.15,000/- per month. The details are available in the following link
- http://mrec.ac.in/NAACDocument/20210602224310-All_hired_students_2021_05_21_19_30_14.pdf
- There is a significant impact on the placements as well. The following table gives the year wise placement figures.

Year	2019-20	2018-19	2017-18	2016-17	2015-16
Number of placed students	770	787	824	731	506
Number of Outgoing Students	1083	1133	1259	1193	1153
Percentage	71.10	69.46	65.45	61.27	43.89

- Few clippings from various popular movies and the related videos are collected and compiled into one video. Various magical effects are created on this compiled version to give the viewers a feel of the mind-boggling effects that can be created using VFX. Sky is the limit for the variety of effects that can be created. It all depends on how creative is the person who is handling VFX effects. The sample video available in the following link (<https://youtu.be/CM7dE7ZdPaE>) reveals the magical effects of VFX.
- The aerial view of the campus and the journey of 2016 – 20 batch B.Tech. students are beautifully edited and produced in the video available in the following link (<https://youtu.be/235Wgj7Tu30>).
- The graduation day of B.Tech. 2016 – 20 batch, MBA and M.Tech. 2018 – 20 batch students is video recorded. Excerpts from those videos are collected and the resultant video is enriched with VFX. The edited video is available in the following link (<https://youtu.be/loa2C49rn4>).

Problems encountered and resources required:

The facilities provided at the Centre of Excellence need to be reviewed continuously and upgraded as and when required. Also, the expensive equipment needs to be properly and cautiously utilized and maintained. The supportive management, visionary academic leadership and the dedicated team of the Centre of Excellence help in easily handling these issues.

Title of the Practice: Ecosystem to promote sportsmanship

Objectives:

1. To provide the basic infrastructure for playing various games and sports.
2. To build up the confidence level among the students by providing opportunities to showcase their talents in various games and sports.
3. To encourage the sportsmanship among the engineering students by organizing various tournaments.
4. To help the students in maintaining their physical fitness.

The context:

The growing competition to enter into higher education institution particularly professional education like Engineering has literally discouraged the students to think about physical activities like proper exercise and playing games and sports. The stressful environment in which most of the students are groomed in 10+2 stage piled up the stress on the tender minds of the students. Therefore, the institute started promoting sportsmanship among the engineering students as the institute believes in the concept of sound body and sound mind.

The practice:

The institute follows different methods in identifying the talent among the students. In the initial days of their admission into the college, selections are conducted for various games and sports to identify and tap the young talent in the first-year students. They will be given a chance to

join the college team for that particular sport. Qualified physical directors groom the sports talent further so as to equip the student to contribute his part in the victory of the college team. The following are the various major facilities available in the college.

- Two shuttle badminton courts of 149.24 sq metre area one each for boys and girls.
- Two Volley ball courts of 252 sq metre area one each for boys and girls.
- One Basketball court of 510 sq metre area for both boys and girls.
- Two Kabaddi courts of 238 sq metre area one each for boys and girls.
- One Throwball court of 188.76 sq metre area for girls.
- One Cricket ground of 65 metre radius and 13266.5 sq metre area

Besides the above facilities, there are other indoor game facilities like Carroms, chess, Table tennis etc. In addition to these sports facilities a well-equipped, well ventilated and spacious Gym facility is also available in the sports complex to help the students in maintaining their fitness. Well qualified and amply trained Physical directors are appointed to train the students in their interested game / sport. Every year once the first-year admissions are completed selections into various college teams will be announced and all the interested students are encouraged to participate in the selection process. The selection into the teams is purely based on the students' talents. The selected students will be clubbed with the senior students already in the college team and coaching sessions are conducted. These teams are encouraged to participate in various engineering colleges, affiliated JNTUH University, BITS Pilani, Hyderabad and other reputed tournaments.

Also, there is a sports club under Students' Associations Council (SAC) which encourages the students to play any game / sport of their choice during the SAC hours on every Saturday from 2:30PM to 4:10 PM.

The institute conducts Games and sports competition in connection with the two day national level student techno cultural fest Akshara and in connection with the college annual day Resonanz.

Evidence of success:

- **Cricket** team Won the ABVP State level inter collegiate cricket tournament held in September 2019.
- **Kabaddi** team won the ABVP State level inter collegiate cricket tournament held in September 2019.
- **Volley ball** team won the State level tournament organized at BVRIT in December 2019.
- **Cricket** Team emerged as the **overall Champions** in the Inter College Cricket Tournament **SPORTS BOUT 2K19**
- **Basketball** team emerged as the **Runners** in the Inter College Basketball Tournament **SPORTS 2K19 at HITAM**
- **Volleyball** Team emerged as the **Winners** in the Inter College Volleyball Tournament at **KPRIT Hyderabad.**
- **Kabaddi** Team emerged as the **Winners** in National level fest **Akshara at MREC, Hyderabad.**
- Inter College Sports Fest State Level **Volley ball Winners at MRITS, Hyderabad.**
- Inter College Sports Fest State Level **Carroms Winners at MRITS, Hyderabad.**
- Inter College Sports Fest State Level **Table Tennis Winners at MRITS, Hyderabad.**
- Inter Engineering College Tournament **Throw Ball RUNNERS at MREC, Hyderabad.**
- Inter Collegiate Sports meet JNTUH Zone – C **Volley ball Runners** in January 2020.
- The above mentioned details are few of the many such achievements done by our students. Besides these team performances, students individually got selected in the affiliating University JNTUH team in various Games and sports and represented the University team in various venues. The following are the details.
 - K. Akhil Surya of IV B. Tech. ME represented the university team in Volley ball in the tournament held at Krishna University.
 - K. Sai Teja of IV B. Tech. CSE represented the University team in Swimming in the tournament held at Lovely Professional University.
 - P. Ravali of III B. Tech. CSE represented the University team in Soft ball in the tournament held at Punjabi University.
 - S. Balasai vivek and B. Prudhvi Naik of III B. Tech CE and I B. Tech. ECE respectively represented the University team in Net ball in the tournament held at Calicut University.
 - M. Hemanth Kumar of III B. Tech. CSE represented the University team in Taekwondo in the tournament held at Punjabi University.
 - P. Siddarth and P. Satish Goud of III B. Tech. ME and II B. Tech CE respectively represented the University team in Hockey in the tournament held at Bengaluru University.
 - B. Yeshwanthi of III B. Tech. CSE represented the University team in Kabaddi, in the tournament held at Veltech University.
 - S. Pavran Lakhan and Bhavik of IV B. Tech. ME and III B. Tech. ECE represented the University team in Football in the tournament held at VIT Chennai.

Problems encountered and resources required:

- As the students perceive professional education, they will be having hectic academic schedules which does not permit them to have proper practice. This problem is handled by permitting the students to practice beyond the college hours whenever required, under the supervision of the physical directors.

Permissions are granted to the students to come late to the college or to go early from the college in few special cases where the students are exposed to specialized training. These permissions avoid the stress on the students part to meet the institute's working schedules.

Best practices in the Institutional web site

[View Document](#)

Any other relevant information

[View Document](#)**7.3 Institutional Distinctiveness****7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words****Answer:**

Malla Reddy Engineering College - MREC adopts various unique measures to help and support the students and faculty members. A few of them are discussed below.

Student related activities:

MREC(A) prioritizes the overall grooming of the student. Accordingly, the institute provides ways and means to the students to explore and expose their innate talent in co-curricular and extra-curricular events. **Students' Associations Council (SAC)** is an agglomeration of various Student clubs like Singing club, Dance club, Fine arts club, Technical club, Literary club, Sports club, Social service club etc. These different clubs plan and conduct various activities in the afternoon session on every working Saturday. The Sports club usually draws students from all the years of study and from all programmes. Various games and sports teams of the institute participate in inter collegiate tournaments and inter university tournaments regularly. Technical clubs bring out the innovative, creative and coding talents of the students. Each department has a dedicated technical club that plans activities on a regular basis to test the above talents of the students.

Apart from these SAC activities, special care is taken by the institute to offer **Skill development training programmes** to the students so as to ensure that the students get suitable Placement opportunity at the end of their programme of study. These skill development training programmes are offered on need basis right from the first year onwards. The Centre of excellence complements and supplements the departments in arranging such value added trainings.

Also, the students are trained to crack the certification exams like **Business English Certificate** by Cambridge University. In the recent batch, about **316 students** got **BEC certified**.

Another unique effort made by the institute is the **Assisted Collaborative Teaching (ACT) hour**. The details are available in the following link. [http://mrec.ac.in/NAACDocument/20210605001133-BP_Assisted%20Collaborative%20Teaching%20\(ACT\)%20hour.pdf](http://mrec.ac.in/NAACDocument/20210605001133-BP_Assisted%20Collaborative%20Teaching%20(ACT)%20hour.pdf)

Yet another point worth mentioning here is the **Course Monitoring Committee (CMC)** meetings. The Course Monitoring Committee comprises of the Dean, the concerned HoD, the concerned class in-charge and about 4 – 5 students who are good at academics / regular to the classes. The details are available in the following link.

http://mrec.ac.in/NAACDocument/20210605001430-BP_CMC%20meeting.pdf

Faculty related activities:

Our institute adopts a novel way of energizing the staff members. All the staff members irrespective of their designation / role are invited along with their family members for a 'Get together' in an amicable and accessible location once in a semester. Here all the attendees are grouped into different categories like male, female and children etc. Interesting competitions and funny games are conducted. In the afternoon all the attendees will have group lunch. Soon after the lunch few of the staff members with special talent like singing and dancing are given an opportunity to showcase their talent. At about evening snacks are served to all the attendees. Attractive gifts are awarded to the winners in all the competitions. Finally, the event is concluded with a brief thanks to the organizing and coordinating team.

Faculty and student dashboards:

Information has a crucial and indispensable place in this digital era. MREC(A) adopted its own and unique way of handling and presenting the data to the outside world. Our institute uses four platforms to project the information about various activities that take place in the campus like academic, co curricular, extra curricular, FDPs, Conferences etc. The first platform is the institute's official website www.mrec.ac.in in which comprehensively covers all sorts of information about the institute.

This website is supported by the second platform www.mrecacademics.com in the backend in a dynamic manner. Login credentials are given to all the students, teaching and non-teaching staff in this second platform. Students use these login credentials to access the study materials, assignment questions and to submit the completed assignments. Also, they can attend the online classes using the same credentials.

Using these login credentials faculty members get access to 'Faculty dashboard' where the data about – Faculty personal and academic profile, additional roles and responsibilities, faculty research contributions can be filled. Also, faculty can upload the course file, Question bank for mid exams besides creating assignments and evaluating the submitted assignments.

The coordinators of various activities like SAC coordinators, Media coordinator, Events coordinator etc have their own login credentials. Using these login credentials these coordinators can upload the details of various activities / events conducted in the institute. This uploaded content is

visible to the visitors in the college official web site. This content can be dynamically updated by the concerned coordinators.

The content uploaded by the faculty, the classes conducted and attendances marked etc are monitored by the concerned Heads of the departments through their dedicated dashboards. Various privileges like addition of BoS minutes, infrastructure details, workshop details, conference details, MoU details, faculty achievement details, etc are provided for the HoDs in their respective dashboards.

Also, they can view the course files of the faculty members, manage the students – like allocating batches, allocating electives, adding mentor to the student etc. HoDs can process the leave requests, CCL and OD requests of their faculty members through the Leave manager in their dashboard. Similarly, the Dean (academics) has got a privilege to monitor the faculty members across all the departments. The Principal and the Director have privilege to monitor all the activities – curricular, co-curricular and extra-curricular, across all the departments.

The third platform is www.mrecexamcell.com, the dedicated portal for announcing the students end semester examination results. This portal is developed to help the parents in particular to access the results of their wards.

The fourth platform is www.mrecexams.com which helps the students to take their exams online in proctored mode. It is designed in such a manner that it is simple, user friendly, easily accessible yet robust. It helps the institution in promptly conducting the exams so that the precious time in academic schedule is not affected in the cases of current pandemic situation.

File Description	Document
Any other relevant information	View Document
Appropriate web in the Institutional website	View Document

Extended Profile

Program

Number of programs offered year-wise for last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
13	13	13	13	17

File Description	Document
Institutional data in prescribed format	View Document

Number of departments offering academic programmes

Answer: 12

Students

Number of students year-wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
4379	4355	4457	4419	4521

File Description	Document
Institutional data in prescribed format	View Document

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
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File Description	Document
Institutional data in prescribed format	View Document

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
4359	4351	4430	4422	4514

File Description	Document
Institutional data in prescribed format	View Document

Number of revaluation applications year-wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
514	539	513	462	412

Teachers

Number of courses in all programs year-wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
588	572	555	509	467

File Description	Document
Institutional data in prescribed format	View Document

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
318	331	330	338	335

File Description	Document
Institutional data in prescribed format	View Document

Number of sanctioned posts year-wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
318	331	330	338	335

File Description	Document
Institutional data in prescribed format	View Document

Institution

Number of eligible applications received for admissions to all the programs year-wise during last five years

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
1542	1524	1542	1446	1578

File Description	Document
Institutional data in prescribed format	View Document

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
488	481	488	459	500

File Description	Document
Institutional data in prescribed format	View Document

Total number of classrooms and seminar halls

Answer: 89

Total number of computers in the campus for academic purpose

Answer: 2130

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

Answer:

2019-20	2018-19	2017-18	2016-17	2015-16
715.99	561.4	630.27	553.81	586.34

Conclusion

Additional Information :

Recognition and Awards

- Accredited by the National Board of Accreditation (NBA) for 8 programs and National Assessment and Accreditation Council (NAAC) with 'A' grade (Second cycle with a score of 3.20).
- Recipient of World Bank Assistance under TEQIP-II S.C. 1.1 with funding of Rs. 4 Crore
- Recognized by AICTE-Scheme for Promoting Interests, Creativity and Ethics among Students (SPICES)
- The college has been selected under the "Margdarshak" scheme of AICTE for mentoring and motivating 10 institutions to attain the benchmark accreditation from NBA.
- Gas testing laboratory recognized by Ministry of Coal Mines.
- Two NSS UNITS are successfully functioning under the support of the JNTUH NSS Wing and successfully completed Unnat Bharat Abhiyan (UBA) projects.
- Awarded with **ISO 50001:2011** and **ISO 14001:2015** in Energy-management System and Environmental Management System respectively.
- Received the award of **Best Private Engineering College in Telangana** by Better India Education Awards 2019, Today Research and Rating.
- Received approval from MHRD Industry Innovation Council.
- **Silicon India** magazine recognized MREC as **College of the Year 2017**.
- Higher Education Review magazine recognized MREC as **Engineering College of the Year 2015**.
- MREC established **Skill and Personality Development Centre for SC/ST** students under the support of AICTE.
- Received **38th Rank** in India's top 50 Engineering Colleges Survey 2019 by the Academic Insights.
- Recognized as a member of **the National Rural Entrepreneurship Mission** in December 2020 by the Mahatma Gandhi National Council of Rural Education (MGNCRE).
- Received **Institutional Transformation Leadership award** by IUCEE in Jan 2018.
- Received AAA+ Rating by Careers360.
- Received 119th rank in the AICTE Internshala ranking.

Concluding Remarks:

Malla Reddy Engineering College has been striving hard, since its inception in the year 2002, to fulfil the needs of the students by enhancing their technical skills and knowledge of various concepts and soft skills in order to make students more employable, more responsible, and more useful to society. The institute has created a conducive environment for quality teaching, learning, and research and succeeded in forging institute-industry collaboration.

The institute offers courses for diverse areas of engineering and management. Innovative methods such as project-based learning, ACT hours, and Course Monitoring Committee (CMC) Meetings have been introduced to enable an interactive and participative teaching-learning environment.

The institute has excellent infrastructure and offers courses of relevance to students from all across the country. The institute provides ICT-enabled services for enhancing the teaching-learning process. The institute works towards making students technically sound and socially responsible and to achieve this objective it conducts various extension activities regularly on issues such as gender discrimination, climate change and road safety. The institute library is well-furnished with books, journals, research articles of good quality. The institute protects the interests of all its stakeholders while implementing the various policies and regulations stipulated by the regulators of higher education.

The institute adopts several welfare measures for staff such as supporting financially and providing insurance, etc. The institute also supports the students through institutional scholarships. The institute has various clubs such as literary club, music club, social service club, technical club, and fine arts club to cater to the all-round development of the students and these clubs function effectively to develop students interdisciplinary knowledge and 21st-century skills such as creativity, critical thinking, collaboration, and problem-solving skills.

The kind of progress that the institute has recorded in recent times in terms of faculty acquiring additional qualifications, quality research publications by the faculty and students, book chapters and books published by the faculty, incremental growth in the students placements, speak volumes about the success of the institute.

EXCLUDED METRICES

ANNEXURE

Terms and Conditions

- I hereby declare that the above mentioned information are true and correct to the best of my knowledge and belief.
- I hereby declare that the mentioned metrices are excluded in my knowledge.
- I hereby declare that 60% students details for initiate Students Survey are uploaded to the best of my knowledge.