

# FOR 2<sup>nd</sup> CYCLE OF ACCREDITATION

# MALLA REDDY ENGINEERING COLLEGE FOR WOMEN

MAISAMMAGUDA, DHULAPALLY, POST VIA KOMPALLY, SECENDERABAD-500100 500100

https://www.mallareddyecw.com

# Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

December 2023

# 1. EXECUTIVE SUMMARY

# 1.1 INTRODUCTION

Malla Reddy Engineering College for Women -MRECW (Autonomous Institution), established in 2008, is approved by AICTE, New Delhi and affiliated to JNT University, Hyd.

The college has UGC Autonomous Status by Govt. of India, Accredited by NAAC with 'A' grade, Programmes Accredited by NBA, ISO 9001:2015 certified, 2(f) & 12(B) Recognized by UGC, Ranked by NIRF Innovation under the Rankband(151-300), MHRD, Govt. of India, AAAA+ Rated in Top Engineering Colleges Survey 2021 by Digital Learning Magazine, AAAA Rated by Careers 360 Magazine, Ranked as 7th in top Engineering College of Super Excellence in India by CSR 2023, 86 National Ranking by the Week Magazine 51st National Ranking and 6th Telangana State Ranking by Times News Magazine, 132 National Ranking by India Today, Platinum Rated by AICTE-CII Industry Linked Institutes Survey, Top 10 Women Colleges in India-2022 by Women Entrepreneur India Magazine, recipient of "Best College of the Year-2019" from Education Matters, "College of the Year-2017 Award" from Silicon India Education, "Best Engineering College in Telangana & A.P. Award" from International Education Awards, Time Cyber Media Pvt. Ltd., "Education Leadership Award" from Dewang Mehta National Education Awards & "Engineering Educators Award" from University of Bradford, U.K. Received Sixteen (16) University Academic Gold Medals from JNTU, Hyderabad for student academic excellence.

The college offers B.Tech Programmes in ECE, CSE, IT, CSE(AIML), CSE(DS), CSE(CS), CSE(IOT), CSIT & EEE, M.Tech – ES, CSE & MBA and has a strong vision of offering world class training to the promising engineers. 100% of the faculty members are ratified by JNTU Hyderabad. The College offers pre placement training programmes, e-learning, e-Training & e Assessment in collaboration with Time Institute, Training & Assessment through Code Tantra and Reference Globe, career connect and industry connect programs. College initiates and organizes International and National Conferences in association with Scopus Indexed journals, Workshops and Refresher courses in the different Engineering disciplines to upgrade the knowledge of the faculty members. Many faculty members have attained patents, received awards, published books, more than 600 SCI/Scopus Indexed publications and huge number of publications and presentations in reputed International/National journals and conferences.

# Vision

- Visualizing a great future for the intelligentsia by imparting state-of the art Technologies in the field of Engineering and Technology for the bright future and prosperity of the students.
- To offer world class training to the promising Engineers.

## Mission

- To nurture high level of Decency, Dignity and Discipline in women to attain high intellectual abilities.
- To produce employable students at National and International levels by effective training programmes.
- To create pleasant academic environment for generating high level learning attitudes.

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

# **Institutional Strength**

- The college has pioneering and visionary management committed to maintain quality educational and research environment.
- Very Strong Infrastructure facilities with well established laboratories.
- NAAC & NBA Accredited and UGC autonomous Institution.
- Qualified, Dedicated, Committed, & Competent Faculty.
- Well structured counseling and mentoring system for students.
- Very substantial training and placement department to improve Skill for Upscale the Knowledge and for the Employability by providing.
  - Value Added Certification Training Programmes such as CISCO, Microsoft, Oracle and Business English Certificate (BEC), Oxford Achievers Certification & Pearson Certification.
  - Campus Training Programs
  - Campus recruitment training for employability.
  - Project based training
  - Finishing school training
- Holistic approach for overall development of students by emphasizing co curricular and extra-curricular activates.
- Dedicated Global Education and Career Guidance cell for the benefit of students for higher education and placements.
- Well-organized R & D cell
  - Quality publications of research work in proficient journals like UGC,SCOPUS and SCI etc
  - o Organizing International conferences with ISBN number
  - Research Funding projects
  - Book Publications with ISBN number
  - International conference proceedings with ISBN number
  - Patent Publications and grants
  - Awards for faculty
- Active reinforced Entrepreneur Development cell (EDC) providing an environment for selfemployment and entrepreneurship development through training programmes to promote women entrepreneurship in the region in collaboration with WE HUB, ALEEP- WEHUB, JHUB and JTBI.
  - Research culture promotion
  - Encourages forging collaborations with outside world.
- Enduring Industry Institute Partnership cell (IIPC)
  - o Consultancy projects and industrial visits
- Efficient Counseling and Mentoring cell
  - Constant guidance and motivation to the students for Academic Excellence and personality development.
- Systematic Women Protection & Grievances Redressal cell
  - Ensured safety of the women students.
  - Decent code of conduct in the students.
- Excelling research eco system (MSME recognized our college as Host institution and ECE & CSE departments are having recognized Research Centres by affiliating JNTU Hyderabad).
- Awards of faculty
- Effectual functioning of IQAC cell for quality improvement
- Strong and active Alumni Association is the strength of the Institution.

#### **Institutional Weakness**

- Collaborative Faculty/Student exchange programs with International Universities
- Scope for EEE & MBA departments also for recognition as a research center by affiliating university.
- PG programs in various specializations

# **Institutional Opportunity**

- Institution is located in semi-urban and very near to Hyderabad hi-tech city and financial district, where MNCs and Industries are located for good Industry Institute Interaction in terms of guest lectures in advanced technologies & workshops by Industry experts.
- Visionary, financially and socially strong management.
- Skill development for students to make them competitive in the current job environment.
- Offering courses through Coursera and NPTEL to students and faculty members.
- Establish stronger relationship with R & D organizations.
- Institute has scope to find a place in NIRF ranking
- Opportunity to maximize the potential of Centre for Development of Communication Skills, Robotics-Centre of Excellence, CISCO networking academy, center for Human Excellence and Qualizeal grace happer Centre of Excellence.
- pre-on boarding up-skilling programs and internships provided by various MNCs like Accenture, capgemini, Cognizant, Wipro, IBM, EPAM, Qualizeal, Zensar and DXC technology etc
- The institute-industry interaction is showing increasing trend of collaboration with several industries and Centers of Excellence.
- More opportunities exist to receive grants and research funds from government organizations like UGC, AICTE, MHRD, DST & SERB and corporate houses etc.
- MNCs & Industry is looking for women employees for maintaining gender equality.
- Girl students are well disciplined & committed for career development.
- Alumni- Brand Ambassadors: occupying strategic position in industries and are also in abroad, which can result in substantial mobilization of resources
- Promoting entrepreneurship among students to enable more employment for social upliftment
- Courses offered by the institution are very demanded for IT enabled services and Core Industries hence placement record is extraordinary.

#### **Institutional Challenge**

- Government of India's New Education Policy (NEP) -2020, which paves the way for foreign universities to setup campuses in India.
- Lack of interest among bright engineers to pursue research/teaching as a career.
- Faculty with Ph.D qualification in emerging areas.
- Girl students are sensitive and emotional.
- Girl students with varied socio- economic background.

- Adaption to fast changing technology and pedagogical innovations
- The constant need for improving facilities and industry interaction that will increase employability.

# 1.3 CRITERIA WISE SUMMARY

# **Curricular Aspects**

- 1. The Primary objective of the Malla Reddy Engineering college for Women (MRECW) is with the twin objectives of providing quality Technical education and values. The institute offers a wide range of UG & PG programs contributing to science & technology enabled for the **local**, **national**, **regional** and **global developmental needs**.
- 2. The Program Educational Objectives (PEOs), Program Specific Outcome(PSOs), and Course Outcome(COs) are designed in consonance with the graduate attributes.
- 3. The institution focuses on **employability, entrepreneurship, and skill development** in its programmes and regularly updates its course syllabi to meet contemporary requirements with 95 % of the courses are focused on employability and skill development, while 5% of the courses are focused on entrepreneur development.
- 4. The students are given wide choice of electives, based on their aptitude, skill, and ambition. The institute has introduced inclusive courses on **Professional Ethics**, **Gender**, **Human Values**, **Environment and Sustainability** which are offered at various levels in all UG programmes along with Women empowerment programmes, co-curricular, extra-curricular and counselling activities for well rounded individuals.
- 5. Every regulation has updated with skill oriented new courses to meet demand of industry requirements.
- 6. As per **NEP 2020**, MRECW encourages an Inter-disciplinary approach and Innovative Product Development to enhance all round abilities.
- 7. It is mandatory for all the students to take up **Value Added Course**s, undertake **field projects and Internships**.
- 8. The **feedback received from the students ,Teacher, Employer and Alumni** are carefully analyzed, discussed and appropriate actions are initiated at various bodies including the Department Academic Committee, Academic Council, etc.

# **Teaching-learning and Evaluation**

MRECW follows innovative strategies in **Teaching**, **learning** and **evaluation** for value based education.

- 1. The admission process is transparent which is done according to the guidelines of the State Government and Affiliating University. The average percentage of **Seats filled during the last five years is 98%**.
- 2. The institute **assesses the learning levels** as of slow **learners** are improved by **remedial classes** and **advanced learners** participated in **special progrmmes** like **hackathons**.
- 3. Institution has follows 1:15 Student Teacher Ratio for UG programs and 1:12 student teacher ratio for PG programs.
- 4. The institution has well adopted **experiential learning**, **participative learning and problem solving methodologies** through value added courses and coding practice.
- 5. Faculty are encouraged to use ICT tools for effective teaching through Power Point presentations &

video lectures.

- 6. The Institute provides personalized very actively functioning **Mentor-Mentee Scheme** with Faculty -student mentor ratio is 1:20.
- 7. Academic Calendar is prepared for each semester well in advance and indicates schedule of all academic events like commencement of class work and last day of instructions, examinations and holidays.
- 8. **Teaching Plan** structured in accordance with the specifications to meet the needs of Outcome Based Education.
- 9. A good **number of faculty** with experience of more than 10 years and Ph.D. qualification.
- 10. **IT** integration and reforms are used in conduction of examinations for both semester-end examinations and **Continuous Internal Assessment**.
- 11. **Students** are educated on POs, PSOs and COs, The institution systematically verifies for attainment of **outcomes** and action taken implemented.

### Research, Innovations and Extension

This criterion illustrates about the policies, practices, and outcomes of the institution, with reference to research, innovations and extension activities.

- Board of Governors (BoG) are very much focused on R & D activities in the college and allotted sufficient budget to update research facilities.
- Research committee is very active in the college to create research culture in students and faculty community according to NEP-2020.
- ECE & CSE departments are having recognized Research Centres by affiliating Jawaharlal Nehru Technological University, Hyderabad.
- The Board of Members of Governing Body sanctioned seed money grants for in-house research projects to interested young research faculty Rs. 22, 91,658 over past 5 years.
- The college received research grants of amount Rs.35, 66,044 from AICTE regarding MODROBS, GOC & SPDC and corporate houses etc.
- The Institution offers consultancy services to provide technical expertise to the Industries nearby and to the society generated revenue of Rs. 72,00,000 during 5 years.
- Good number of faculty members have been recognized as research supervisors by the affiliating JNTU Hyderabad.
- The Entrepreneurship Development cell and Industry Institution Interaction cell encourages forging collaborations with outside world.
- MSME recognized our college as Host institution and sanctioned an amount of Rs. 14.3 lakhs "Ghatak Robot" under Incubation Scheme- a semi autonomous robot for Army department.
- The college always forefront to encourage the faculty members for attending workshops/conferences and publishing their research work in proficient journals like UGC,SCOPUS and SCI etc.
- Various extension programmes for social sensitization are conducted which include Environmental Protection and Energy Conservation awareness programmes, Blood Donation Camps, Health check up programmes, Village Adoption, Literacy Campaigns etc for holistic development of the students.
- The Institution has functional MOUs with Industries/professional bodies/organizations to pool up the knowledge and expertise of the technical people of the industry and the college for mutually agreed execution of activities and collaborative research.

# **Infrastructure and Learning Resources**

The institution is established in 2008 with pleasant environment within the area of 10 acre 20 Guntha campus with excellent infrastructure facilities such as Laboratories, ICT enabled class rooms, Duplex Library, sports and Games, Hostels.

MRECW has scaled great heights locally and globally in industry and global universities for maintaining the same status with strategic plans has been carried out.

#### **Classrooms & Auditoriums:**

- There are 66 Classrooms and 4 Seminar Halls which are equipped with ICT facilities. LCD Projectors or Smart boards are available in every class room to facilitate effective Teaching-Learning.
- A state of the art auditoriums with a seating capacity of 1500 and also mini auditorium with 200 capacity, administrative office, staff rooms, studio rooms, Placement office and examination cells, garage and washrooms.

## Library:

- Institute is fully automated library with more than 43789 books and journals, 34777 e-journals and 2460 e-books.
- Procurement of latest learning materials.

# **Hostel:**

• Four hostels which can be accommodates with 1800 girl students, indoor sports hall and Gymnasium, first aid centre, girls rest/recreation room, meditation classes, aerobics fitness training, yoga classes and many more.

# **Computing Facilities:**

• In IT infrastructure, the college is equipped with more than 2000 Computers. Internet connectivity with a total of 1000 MBPS bandwidth is provided.

# **E-Content Growth:**

• The studio rooms are equipped with facilities like video editing, audio mixing and basic animation software's. With this facility in place, the institution is in a position to develop e-content and promote elearning through online platform.

# **Student Support and Progression**

MRECW is keen in extending all sorts of support and assistance for the academic Students are provided with capacity building training programs to equip them with the current day demands of the industry and enrich their employability scope and Entrepreneurship.

57% of students benefited through scholarship provided by the Government and institution during last five

Page 7/129 23-02-2024 10:28:38

years.

Career Guidance Cell organized 43 awareness programs including e-counseling and guidance for competitive examinations during the last five years.

91 Capacity development and skills enhancement activities in Soft skills, Language and communication skills, Life skills.

The institution adopted various committees like Grievance Redressal Committee, Internal Complaints Committee and Anti-Ragging-Committee help the students to address the issues.

The institution has excellent placement record. On average 86 % of the students are placed. 4% of the students opt for higher education in prestigious institutions.

61 awards/medals won by students for outstanding performance in sports/cultural activities at inter university/state/national / international levels.

Guidance for competitive examination, Mentoring, Remedial coaching, Yoga, and meditation classes are initiatives for students' all-around development.

The institute organize and encourage Students are to participate in Intra and Inter Sports competitions, Cultural competitions, Technical fest and other events through Active clubs.

Physical education department organizes various tournaments and encourages sportsmanship in campus in the name of TECHTROPHY & CHAMPIONSHIPTROPHY.

122 sports and cultural events / competitions, Technical fest were organized in the last 5 years.

Registered alumni association with more than 6000 members, actively contributing financially and also support juniors by their inspirational seminars and Corporate Alumni 2 campus connect programs.

# Governance, Leadership and Management

- MRECW, aligning its Vision, Mission, and Quality Policy with Indian Higher Education objectives, embraces a participatory governance style. This fosters effective administration and stakeholder satisfaction through delegation to competent functionaries and committees.
- The institution prioritizes value-based education, implementing NEP-2020, aiming to mould students into professional technocrats by adapting to industry changes through robust learning opportunities and infrastructure.
- Decentralization and participative management are fundamental to MRECW's operational approach.
- Successful implementation of the strategic plan is evident across policies, administrative structures, service norms, and processes.
- Governance meetings actively discuss future infrastructure, human resources, and financial needs, shaping actionable plans.
- Leadership roles—Principal, Deans, HODs, and faculty—are pivotal in executing action plans aligned with the institution's Vision and Mission. Senior academics lead committees to ensure program implementation and policy adherence to achieve institute goals.

- The institution encourages faculty development through financial support for academic activities, training, refresher courses, and orientations.
- Financial audits, both internal and external, occur annually, fostering financial transparency.
- IQAC plays a pivotal role in quality plan implementation and review of teaching-learning processes and outcomes.
- MRECW's participation in NIRF, AAA implementation, and departmental accreditation (CSE, IT, ECE, EEE) by NBA, along with ISO certification, showcase its commitment to excellence.
- IQAC remains responsive in continually evaluating teaching-learning processes and structures, ensuring consistent improvements.
- Overall, MRECW's strategic approach, participatory governance, and emphasis on quality education and continuous enhancement underscore its commitment to meeting Indian Higher Education objectives while preparing students for evolving industry demands.

# MALLA REDDY ENGINEERING COLLEGE FOR WOMEN, AUTONOMOUS promotes

holistic development for its stakeholders and neighbourhood through social, environmental, and health awareness drives organized by NSS Unit 1&2.

The Skill for Employability & Enhancement of Knowledge program aims to equip students with various skills for various job roles in the technology sector, fostering an interdisciplinary talent hub and providing them with the right skillset at the right time, ensuring their employability in various industries. 04-year RoadMap is prepared in order to provide right skillset at right time to our students.

The college is sensitive to gender equity and promotion. Counselling & Mentoring facilities, gym, dedicated sports areas, waiting and sick rooms are provided to students with adequate safety and security, and the campus is under CCTV surveillance.

The college since inception is committed to the environmental and green and energy conservation initiatives by taking crucial steps in the areas of solar energy, biogas production, sensor-based energy conservation, and energy saving equipment.

Optimizing intelligible reuse and recycling and, ensuring proper waste segregation and management is central to nurture sustainability.

The organisation implemented rainwater collecting, open well recharging, and waste water recycling as water conservation facilities.

The organisation has a policy of routinely conducting audits for Green, Environmental Protection, and Energy Consumption.

The institution has strong commitment to differently abled students and provides facilities such as lifts, ramps, special washrooms.

The institution raises awareness regarding Code of conduct for students, faculty, and administrators.

The college celebrates all important national and international festivals and organises number of activities to promote universal values.

Page 9/129 23-02-2024 10:28:38

The college has adopted many best practices out of which two distinctive practices are 'Adopted Two Villages by National Service Scheme (NSS) Units' and 'Value added certifications in technology and communication- upscale the knowledge of students for the employability.

#### **Institutional Values and Best Practices**

## MALLA REDDY ENGINEERING COLLEGE FOR WOMEN, AUTONOMOUS promotes

holistic development for its stakeholders and neighbourhood through social, environmental, and health awareness drives organized by NSS Unit 1&2.

The Skill for Employability & Enhancement of Knowledge program aims to equip students with various skills for various job roles in the technology sector, fostering an interdisciplinary talent hub and providing them with the right skillset at the right time, ensuring their employability in various industries. 04-year RoadMap is prepared in order to provide right skillset at right time to our students.

The college is sensitive to gender equity and promotion. Counselling & Mentoring facilities, gym, dedicated sports areas, waiting and sick rooms are provided to students with adequate safety and security, and the campus is under CCTV surveillance.

The college since inception is committed to the environmental and green and energy conservation initiatives by taking crucial steps in the areas of solar energy, biogas production, sensor-based energy conservation, and energy saving equipment.

Optimizing intelligible reuse and recycling and, ensuring proper waste segregation and management is central to nurture sustainability.

The organisation implemented rainwater collecting, open well recharging, and waste water recycling as water conservation facilities.

The organisation has a policy of routinely conducting audits for Green, Environmental Protection, and Energy Consumption.

The institution has strong commitment to differently abled students and provides facilities such as lifts, ramps, special washrooms.

The institution raises awareness regarding Code of conduct for students, faculty, and administrators.

The college celebrates all important national and international festivals and organises number of activities to promote universal values.

The college has adopted many best practices out of which two distinctive practices are 'Adopted Two Villages by National Service Scheme (NSS) Units' and 'Value added certifications in technology and communication-upscale the knowledge of students for the employability.

# 2. PROFILE

# 2.1 BASIC INFORMATION

Name and Address of the College	
Name	MALLA REDDY ENGINEERING COLLEGE FOR WOMEN
Address	MAISAMMAGUDA, DHULAPALLY, Post Via Kompally, Secenderabad-500100
City	SECUNDERABAD
State	Telangana
Pin	500100
Website	https://www.mallareddyecw.com

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Y. Madhaveelath a	040-9346118803	9000180136	-	adminmrecw@gma il.com
IQAC / CIQA coordinator	N. Satheesh	-	9704962007	-	sateeshnagavarapu_cse@mrecw.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	For Women
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

# **Establishment Details**

Date of Establishment, Prior to the Grant of 'Autonomy'	01-01-2008
Date of grant of 'Autonomy' to the College by UGC	11-10-2018

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	22-06-2016	View Document		
12B of UGC	22-06-2016	View Document		

	ion/approval by static CI,DCI,PCI,RCI etc(c		dies like		
Statutory Regulatory Authority	Regulatory oval details Instit year(dd-mm- months				
AICTE	View Document	21-06-2023	12		

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

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	MAISAMMAGUDA, DHULAPALLY, Post Via Kompally, Secenderabad-500100	Rural	10.12	40384	

# 2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Comp uter Science And Enginee ring,CSE	48	INTERMEDI ATE	English	660	660
UG	BTech,Comp uter Science And Engineering Cyber Security,CSE CYBER SECURITY	48	INTERMEDI ATE	English	60	60
UG	BTech,Comp uter Science And Engineering Data Science,CSE DATA SCIENCE	48	INTERMEDI ATE	English	300	300
UG	BTech,Comp uter Science And Engineering Iot,CSE IOT	48	INTERMEDI ATE	English	60	60
UG	BTech,Comp uter Science	48	INTERMEDI ATE	English	300	300

	And Engineering Artificial Intelligence And Machine Learning,CS E AIML					
UG	BTech,Comp uter Science And Information Technology, CSIT	48	INTERMEDI ATE	English	60	60
UG	BTech,Electr ical And Electronics E ngineering,E EE	48	INTERMEDI ATE	English	60	45
UG	BTech,Electr onics And Co mmunication Engineering, ECE	48	INTERMEDI ATE	English	120	120
UG	BTech,Infor mation Tech nology,IT	48	INTERMEDI ATE	English	60	60
PG	Mtech,Comp uter Science And Enginee ring,CSE	24	B.TECH	English	24	18
PG	Mtech,Electr onics And Co mmunication Engineering, EMBEDDE D SYSTEMS	24	в.тесн	English	24	10
PG	MBA,Manag ement Business Ad ministration, MBA	24	DEGREE	English	60	60

Position Details of Faculty & Staff in the College

23-02-2024 10:28:38

	Teaching Faculty											
	Profe	essor			Assoc	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/Soci ety or Other Authorized Bodies	30			60			182					
Recruited	25	5	0	30	44	16	0	60	76	106	0	182
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				26				
Recruited	7	19	0	26				
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				70				
Recruited	15	55	0	70				
Yet to Recruit				0				

# Qualification Details of the Teaching Staff

	Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	25	5	0	44	16	0	10	10	0	110	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	0	0	0	66	96	0	162	
UG	0	0	0	0	0	0	0	0	0	0	

	Temporary Teachers										
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	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	
UG	0	0	0	0	0	0	0	0	0	0	

	Part Time Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	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	
UG	0	0	0	0	0	0	0	0	0	0	

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	0	0	0	0	0
	Female	4765	246	0	0	5011
	Others	0	0	0	0	0
PG	Male	0	0	0	0	0
	Female	137	24	0	0	161
	Others	0	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	0	0	0	0			
	Female	300	246	222	225			
	Others	0	0	0	0			
ST	Male	0	0	0	0			
	Female	121	86	69	54			
	Others	0	0	0	0			
OBC	Male	0	0	0	0			
	Female	1763	1480	1302	1246			
	Others	0	0	0	0			
General	Male	0	0	0	1118			
	Female	1428	1372	1197	0			
	Others	0	0	0	0			
Others	Male	0	0	0	0			
	Female	0	0	0	0			
	Others	0	0	0	0			
Total	,	3612	3184	2790	2643			

# 2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Page 19/129 23-02-2024 10:28:38

Department Name	Upload Report
Computer Science And Engineering	<u>View Document</u>
Computer Science And Engineering Artificial Intelligence And Machine Learning	View Document
Computer Science And Engineering Cyber Security	<u>View Document</u>
Computer Science And Engineering Data Science	<u>View Document</u>
Computer Science And Engineering Iot	<u>View Document</u>
Computer Science And Information Technology	<u>View Document</u>
Electrical And Electronics Engineering	<u>View Document</u>
Electronics And Communication Engineering	<u>View Document</u>
Information Technology	View Document
Management Business Administration	<u>View Document</u>

## **Institutional preparedness for NEP**

As per the NEP guidelines, curriculum structure has been designed incorporating multidisciplinary education, optimal learning environment and learner centric approach. To this effect, wider consultations were held through a number of workshops and conferences to create awareness and sensitization about NEP-2020 implementation. All UG and PG programmes have been restructured for multidisciplinary options and the Curriculum have been revised to incorporate outcome-based Program Objectives (POs), Program Specific Objectives (PSOs) and Course Objectives (COs). All undergraduate students are encouraged to undergo for Internship. Experiential learning has been enhanced. Open electives are offered in all UG and G Programs from Departments for the students of other departments with a view to impart quality 21st century skills to students. Extra-Curricular activities including NSS, Yoga, Sports, Cultural activities, music wings of the Institute are actively engaged in imparting community and social service to the society thus improving the personality, team work and leadership skills of students. The College has also developed a start-up ecosystem by integrating the Incubation Centre, Innovation under R&D Cell.

Centre of excellence in Multidisciplinary settings are designed and are being established. Value-added courses are offered for UG programs Teaching learning process is transformed in blended mode with emphasis on opting for online MOOC, NPTEL courses. Students are encouraged to undertake projects on societal issues. Enhancement of multidisciplinary research for society's most pressing issues and challenges in the action plan describes MoUs and Collaborations for Research Internship. UG students in 3rd and 4th year study the courses other than their domain as "open elective courses" to gain knowledge on technologies of other domains. Through the student induction programme, technical talks on human values and professional ethics are delivered by the experts so as to build the value education among the first-year students. With autonomy, flexible curriculum can be framed to suit the industry/societal requirements. Institute is also planning for infrastructure augmentation and faculty empowerment/up gradation to cope with NEP 2020 requirements.

### 2. Academic bank of credits (ABC):

The National Education Policy (NEP) 2020 and the Academic Bank of Credits (ABC) share the objective of transforming higher education in India. NEP 2020 aims to bring comprehensive reforms, emphasizing multidisciplinary learning, skill development, and flexibility in curricula. ABC is a credit storing and transferring system that allows students to accumulate and transfer credits earned from different institutions/platforms, enabling interdisciplinary learning and multiple entry-exit points. NEP 2020 acknowledges the importance of such credit-based systems and the integration of ABC aligns with its vision of promoting lifelong learning and digital education. Together, NEP 2020 and ABC offer a promising approach to modernizing higher education, empowering students, and fostering a dynamic learning environment. It is a student-centric platform that facilitates seamless curriculum framework flexibility and encourages interdisciplinary or multidisciplinary academic mobility among Higher Education Institutions (HEIs). The College committed to fostering academic flexibility and student-centric learning opportunities is evident through its adoption of the Academic Bank of Credits (ABC) concept. The Sports, NSS, Yoga are made the

integral part of programmes Skill Enhancement Courses (SEC) have been incorporated including AI/ML, Data Science, Cyber Security and Internet of things to increase the skill and innovation.

Compulsory internships/seminars and other forms of experiential learning methods are included in all programs. Several Value-Added Courses (VAC) have been started to supplement students' interest beyond curriculum. The college has submitted an application for registration with ABC.

# 3. Skill development:

The institution will implement programs to help students improve their skills in line with the goals outlined in NEP-2020 in order to close the skills gap. The Institution shall strengthen the curriculum with adequate skill development content. Being aware that the two major reason of skill shortage are faculty and facility, the institution shall strengthen both. Wherever deemed, the faculty shall be encouraged to take up initiatives like 'Train the Trainer' along with STTPs. This facilitate the institution to use the facility potential of the institution to be utilized maximum for skill development. The Institution shall offer training, skilling, up-skilling and re-skilling for the students on rolls and neighbouring students/unemployed youth. There shall be regular training and skilling activities organized for the benefit of the students. A skill development programs/activities calendar shall be floated to provide the information on skill development activities to the students. Laboratory experiments shall be strengthened to promote skill acquiring by the students. The Institution shall procure training infrastructure for the selected areas to provide skill development for the students. In consultation with the statutory bodies, the institution shall offer certificate program through skill development infrastructure of the Institution. The institution shall apply for 'fund' to prospective funding agencies to support skill development at the Institution. In collaboration with industry, the institution shall organize skill development program and related activates that benefit the students. MRECW has introduced UG and PG students to undergo internship for a period of 4/8/12weeks in industry to enhance / upgrade their technical skills by knowing trending technologies in their domain area to cater to the socio-economic needs. MRECW curriculum (UG and/or PG) includes

courses which integrate crosscutting issues relevant to Professional Ethics, Human Values, Environment and Sustainability. Final year students are encouraged and motivated to take up project works related to societal problems and some students have also received funding from government agencies to execute the project work. Students are motivated to participate in AICTE's Smart India Hackathon competition. Students won prizes in Smart India Hackathon. The college has made numerous MOUs with leading professional bodies / training centres / industries. Though these MOUs many activities such as industrial/site visits, technical talks, workshops, hands-on-training, internship are conducted to enhance skill level of students. Overall, the college commitment to skill development is commendable, as it strives to produce graduates who are not only academically competent but also skilled, adaptable, and ready to contribute positively to society. By embracing a proactive approach to skill development and continuous improvement, the college sets a precedent for other institutions, showcasing the transformative impact of integrating practical learning experiences into the educational journey of its students.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

As per NEP guidelines, to promote Indian knowledge in education, introduced mandatory courses in the curriculum. There are courses on "Human Values and Professional Ethics", "Indian Constitution" and "Indian Traditional Knowledge". The college has many clubs like ""Yoga Club", "Dance and Music Clubs" etc. which organize events regularly on Indian culture. There is meditation club which conducts meditation sessions for both faculty and students. Programmes of "Art of Living" are also conducted from time to time. Encouraging this sort of skill in languages will only ever benefit the student. But, more importantly, it is because India is a land of diverse cultures and languages. The institution offers students an opportunity to learn foreign languages. However, in view of the NEP-2020 envision on teaching-learning in the Indian languages, the institution shall float an environment where students can engage in teaching learning in their mother tongue. Since these efforts shall endorse the students with 'self-esteem', there shall be initiations to teach the part of the course in the local languages. The

Telegu is commonly used language at Telangana and nearby places, therefore the faculty and staff members are encouraged and trained to deliver in classrooms in bilingual mode. Learning resources shall be developed to support the same. However, the importance of communication in 'English' shall not be discouraged because of the nature of working environment for the engineering graduate demanding the same. The teaching-learning in local language shall be considered as an opportunity to curtail 'dropouts' from early stages of the program duration. The ability to express the views, ideas, thoughts, opinions, etc., by the student shall be addressed with a mix of English and local languages. The Induction programmes for newly recruited faculty are conducted regularly. The faculty members are also encouraged to participate in pedagogical training programmes. The college has several clubs, society and NSS unit. The member students are engaged in Indian ancient traditional knowledge activities. Indian Constitution and traditional Knowledge is offered for all the students under Mandatory Course Category. The subject Indian Constitution and traditional Knowledge is used to taught about the importance of Indian cultural and traditions.

# 5. Focus on Outcome based education (OBE):

The college has adopted OBE in teaching-learning process in its teaching and learning process from 2018. Outcome Based Education (OBE) which is a student centric instruction with a clear statement on what Knowledge, skills and attitudes the Graduate Engineer will be able to demonstrate as having acquired on successful completion of a 4-year program of study. Vision and Mission of the Department are framed inline with the Institute's Vision and Mission. Program Educational Objectives (PEOs) and Program Specific Outcomes (PSOs) are also framed by every department to achieve it's vision and mission. Course Outcome (CO) statements are framed for every course and are mapped to 12 Program Outcomes (POs) given by NBA/Washington accord. Based on formative and summative assessments, the set target levels and set attainment levels for a program, attainment levels of POs and PSOs of all the courses of a program are computed. To bridge the curriculum gap and to address all the POs, site/industry visits, technical talks, seminars,

workshops etc. are conducted by every Department. Institute was accredited by NAAC with 'A' grade in the year 2014. Various programs of the Institute were accredited by the National Board of Accreditation (NBA), New Delhi. In the year 2022, 4 UG programs viz. Computer Science and Engineering, Electronics & Communication Engineering, Electrical and Electronics Engineering and Information Technology departments are accredited by NBA. This learnerdriven approach promotes continuous evaluation and fosters 21st-century skills like critical thinking and problem-solving. The question papers are designed to evaluate the attainment of various outcomes and attributes. Extensive and comprehensive training programs have been meticulously designed to equip teachers with the necessary knowledge and skills to effectively align their courses with the identified learning outcomes. These training programs go beyond traditional pedagogical approaches, delving into the core principles of OBE and its application in the classroom. Faculty members are encouraged to incorporate real-world applications, case studies, and problem-solving exercises into their teaching, providing students with opportunities to apply their knowledge in authentic contexts. Moreover, the training equips teachers with tools to promote active learning and collaboration among students. They learn how to facilitate group discussions, debates, and project-based activities that encourage students to take ownership of their learning journey. This learner cantered approach nurtures a sense of responsibility and curiosity, driving students to explore topics indepth and develop a deeper understanding of the subject matter. In tandem with the OBE framework, the college has re-evaluated its assessment practices to align them with the intended learning outcomes.

6. Distance education/online education:

The College has wholeheartedly embraced online education as a transformative tool to enhance learning experiences for its students. Through platforms like Microsoft Teams, Google Classroom, the institution has seamlessly transitioned to a digital environment, creating a dynamic and interactive virtual classroom. To enrich the online learning process high-quality video contents are being developed. These instructional videos cater to various subjects and topics, making complex concepts more accessible to students. The integration of multimedia

elements further enhances the effectiveness of virtual learning. Learning management systems shall be made mandatory for all the faculty to promote online education. Required digital infrastructure shall be updated to support digital learning. Appropriate existing e-learning platforms will be strengthened and content creation, digital repository, and dissemination shall be encouraged in academic practices. A digital repository of content including the creation of coursework, learning materials & Simulations, will be developed for the benefit of the students. Use of Virtual Labs are encouraged. Existing e-learning platforms such as SWAYAM will also be made available to the students to have equal access to quality practical and hands-on experimentbased learning experiences. Digital Studio rooms are used to develop video lectures by the faculty. The college commitment to facilitating extensive digital resources is evident through its digital library. Students can access a vast array of e-books, research papers, journals, and other online academic materials, fostering self-directed learning and exploration beyond the traditional classroom. Moreover, the college has embraced the concept of virtual resource sharing and study groups.

# **Institutional Initiatives for Electoral Literacy**

1. Whether Electoral Literacy Club (ELC) has been set up in the College?

Electoral Literacy Club (ELC) has been setup in the institution and is functioning along with National Service Scheme (NSS). The Principal is the Chairperson of the Electoral Literacy Club with NSS program officer as the Faculty Coordinator. Six Coordinator are also appointed as student coordinators. 100 students are members in the club. The primary objective of the Electoral Literacy Club is sensitizing the student community about democratic rights and importance of votes in elections.

2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?

Yes, The Elc has both faculty coordinator and student Coordinator appointed by the College. Objective: • Engage (actively) in promoting awareness of 'Right to Vote' among students, faculty members and community at large. • Enable critical thinking on issues related to elections, rights,

democracies/non-democracies electoral system and its processes. • Encourage student participation and mobility to aforementioned issues – in theory and practice. Functions: • The ELC members shall meet once a week to engage in a closed or open group session of thematic discussions on relevant topics. • They will organize activities like outreach programs and in campus programs with targeted groups to create voting awareness. • They shall function towards the goal to create and preserve the literature for the club.

3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.

The Following are the initiates undertaken by ELC of the institution: Right to Vote –Pledge • Right to Vote -Awareness in the institution and in nearby villages • Right to Vote -Drawing competition by Students • Right to Vote -Poster Presentation by students • Special Camps for Voters inclusion and correction • Special Camp for EVM and Integrity of the electoral process • Promotion of Ethical Voting • Promotion of voting among senior citizens

4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.

The institution Malla Reddy Engineering College for Women, Autonomous adopted two villages INDIRAMMA COLONY and GUNDLA POCHAMPALLY, under the National Service Scheme (NSS) Units 1 & 2 commendable commitment to holistic community development. With a strong emphasis on healthcare, environmental sustainability, and addressing various social issues students while significantly contributing to the wellbeing of the adopted villages. The objectives of the practice reflecting the public towards the Electoral issues multifaceted approach, envisioning reflexive and socially useful development through village adoption. The primary goals include creating awareness about Electoral and conducting surveys to identify and address basic problems, promoting a duties of the citizen and raising awareness about Voter duty. Additionally, the program aims to identify the potential for further growth in the adopted villages, instill social human values in students.

5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to

The Students above 18 years age are cultured to be registered voter by way of awareness camps and pledge The MRECW-ELC conduct year wise camps

institutionalize mechanisms to register eligible	for the same.
students as voters.	

# **Extended Profile**

# 1 Students

# 1.1

# Number of students on rolls year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
4079	3612	3184	2790	2643

File Description	Document
Provide Links for any other relevant document	<u>View Document</u>
Institutional data in the prescribed format (data	<u>View Document</u>

# 1.2

# Number of final year outgoing students year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
846	723	724	699	693

File Description	Document
Provide Links for any other relevant document	View Document
Institutional data in the prescribed format (data	<u>View Document</u>

# 2 Teachers

# 2.1

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

2022-23	2021-22	2020-21	2019-20	2018-19
225	196	178	152	146

File Description	Document
Provide Links for any other relevant document	View Document
Institutional data in the prescribed format	<u>View Document</u>
Certified list of full time teachers	View Document

# 2.2

Total number of full time teachers worked/working in the institution (without repeat count) during last five years:

Response: 316

File Description	Document
Provide Links for any other relevant document	View Document
Institutional data in the prescribed format	View Document

# 3 Institution

# 3.1

Total expenditure excluding salary year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
674.81	377.08	273.35	193.02	514.90

File Description	Document
Provide Links for any other relevant document	View Document

# 4. Quality Indicator Framework(QIF)

# **Criterion 1 - Curricular Aspects**

# 1.1 Curriculum Design and Development

#### 1.1.1

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

### **Response:**

The Primary objective of the institution is to nurture High Quality Engineering Professionals to meet the global needs. The Curriculum is attentively designed to ensure that the students gain not only the required domain knowledge but also the appropriate skills and attitudes for being globally competitive and workforce-ready.

# Factors considered for curriculum design:

To ensure that the students are equipped with competent domain knowledge, skill set and professional attitude the curriculum is designed aligned to the factors like

- Vision
- Mission
- Programme Educational Objectives
- Programme Outcomes
- Programme Specific Outcomes
- BOS member's suggestions
- Model curriculum as prescribed by the AICTE
- Recommendations of Industry experts, Alumni, Parents & Students

# **Process for Curriculum Design:**

- Initial inputs are obtained from the Course Coordinators for each course, on discussion with the faculty handling the same course for betterment.
- These inputs, in accordance with Industry needs, AICTE & UGC Guidelines and aligned in parallel with PEOs, PSOs &POs, are considered in the framing of the curriculum by the Department Academic Committee, mainly focusing to **the local, national, regional and global developmental needs** as introduction of new courses for diverse skill set development, with the suggestions from various stakeholders to meet.
- The curriculum so developed, is then proposed to the Board of Studies (BOS), Constitution of BOS: Nominee from JNTUH, Academic subject experts from reputed universities like IIT & NIT, Industry, Alumni and Senior faculty members for review, refinement and approval.
- The BOS approved curriculum is then put forth for approval/ratification by the Academic Council. On approval/ratification by the Academic Council, the Curriculum is displayed in the college website and Bees ERP Software.

• Internship is made mandatory for all the students to up-gradation of knowledge in diversified fields and Start up Entrepreneurship is initiated & incorporated in the curriculum to promote entrepreneurial abilities of students for the local, national, regional and global developmental needs.

# Implementation of PEOs, POs, PSOs and COs in Curriculum:

- The curriculum is designed ensuring academic quality with the right choice of courses, open and professional electives, mandatory course titles and contents, in tune with the AICTE & UGC guidelines and Industry requirements.
- Each course consists of Course Outcomes based on the unit or relevant concept model. All Course Outcomes (COs) of every course are mapped with the Program Outcomes (POs), Program Specific Outcomes (PSOs) and Programme Educational Objectives (PEOs) of UG/PG programme relevance to the local, national, regional and global developmental needs.
- Attainment of PEOs, specific to each Programme is measured directly through the success rate of
  the graduating engineers, their placement rate, higher education pursuit & performance of Alumni
  and indirectly through Graduate Exit Survey, Employers Feedback Survey, Alumni Feedback
  Survey and Parent Feedback Survey which exhibits the local, national, regional and global
  developmental needs.
- The Institution carefully regularly monitors the attainments of COs, POs and PSOs of all the programs which are in coherence with the Vision and Mission of the department and suitable actions are taken based on the identified weaknesses, through a well-structured constant and wideranging evaluation mechanism for fruitful improvement.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

#### 1.1.2

The programmes offered by the institution focus on employability/ entrepreneurship/ skill development and their course syllabi are adequately revised to incorporate contemporary requirements

# **Response:**

The institution focuses on employability, entrepreneurship, and skill development in its programmes and regularly updates its course syllabi to meet contemporary requirements. The institution will take up few key considerations to update course syllabi as per contemporary requirements.

**Employability:** The institute designed and developed the curriculum and syllabus that meets industry expectation like problem solving skills, depth analysis on core subjects, and open electives, Professional electives which make sure students can get ready for employment.

Malla Reddy Engineering College for Women prepares and deploys the strategic plan effectively to fulfil the requirements of industry and society by providing quality education with well-established infrastructure which leads to students' progression towards technical, social excellence, leadership development.

**Start-ups / Entrepreneurship**: Start up Entrepreneurship is initiated & incorporated in the curriculum to promote entrepreneurial abilities in the students. The Industry-Institute Partnership Cell (IIPC) continuously establishing partnerships with local businesses, industries, and start-ups can help ensure that the institution's programs are closely aligned with industry needs. This can also provide opportunities for internships and practical experience.

**Internships for skill Development:** Internship is made mandatory for all the students to facilitate upgradation of their skill set in diversified fields along with possible industry oriented projects, which will be helpful for them to gain recent technological knowledge and prepare for placements and employment.

**Resources:** The institution employing instructors with industry experience can greatly benefit students by providing real-world insights and connections. Adequate resources, including updated facilities, materials, and technology are essential to deliver high-quality programmes.

**Feedback Mechanisms:** The institution implements feedback mechanisms for students and industry partners to continuously evaluate and improve the program's effectiveness.

**Adaptive Curriculum:** Ensure that the curriculum is flexible enough to accommodate changes in industry requirements and emerging fields.

**Lifelong Learning:** The institution encourages a culture of lifelong learning among students and faculty to adapt to rapid changes in technology and industry requirements.

Incorporating these considerations into the MRECW approach can helps to maintain a strong focus on employability, entrepreneurship, and skill development while staying current with the evolving demands of the job market and industries

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	<u>View Document</u>

# 1.2 Academic Flexibility

#### 1.2.1

Percentage of new courses introduced out of the total number of courses across all programmes offered during the last five years

**Response:** 36.82

Page 33/129 23-02-2024 10:28:39

# 1.2.1.1 Number of new courses introduced during the last five years:

Response: 528

# 1.2.1.2 Consolidated number of courses offered by the institution across all Programmes (without repeat count) during the last five years:

Response: 1434

File Description	Document
Subsequent Academic Council meeting extracts endorsing the decision of BOS	View Document
Minutes of Board of Studies meeting clearly specifying the syllabus approval of new courses	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 1.3 Curriculum Enrichment

### 1.3.1

Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy -2020 into the Curriculum

# **Response:**

The institution integrates cross cutting issues **relevant** to Professional Ethics, Gender, Human Values, Environment and Sustainability, and other value frameworks enshrined in the Sustainable Development Goals (SDGs) and National Education Policy (NEP) - 2020 into the curriculum by introducing specific courses in the curriculum and various activities such as Orientation Programme, Induction Programmes for first year students, Women empowerment programmes, co-curricular, extra-curricular &counselling activities for well rounded individuals.

To achieve this integration, MRECW focus on below approaches:

# 1. Curriculum Design and Identification of Key Themes

MRECW reviews and revise their existing curriculum to identify gaps and opportunities for integrating cross-cutting issues and value frameworks.

#### a. Human Values and Professional Ethics

A course related to human values "Human Values and Professional Ethics "is offered as mandatory course to all the UG students to pursue at least once during their programme of study. Variety of Social development activities like working in NGOs, organizing blood donation camps, health check-up camps, workshops on social issues, public health, others are regularly conducted.

# b. Gender Sensitivity

A mandatory course is inducted into the curriculum for all the engineering programs. The course aims to develop students' sensibility regarding issues of gender in contemporary India and provide a significant perspective on the socialization of men and women.

Women Protection Cell(WPC) and Anti-ragging Cell to deal with the issues relevant to gender. WPC is constituted to facilitate women development &safety and respect to women. WPC looks into any complaint from girls & women staff.

The cell regularly organizes programs on women empowerment and aims to enable lady faculty and girl students to explore their latent potential in all aspects, providing a congenial working environment for them.

# c. Environment and Sustainability

A mandatory course on Environmental Science is included in all UG programmes to enable the students to learn about the concept of ecosystem and biodiversity and its conservation and to recognize the social issues and human population issues associated to environment. Workshops and seminars on various aspects of environment sustainability are also organized periodically.

#### d. Additional Courses

MRECW included below courses in the curriculum

- Indian Constitution
- Indian Traditional Knowledge
- Intellectual Property Rights
- Audit Courses for PG Students

# 2. National Education Policy – 2020 into the Curriculum

- **a. Interdisciplinary Approach:** As per NEP 2020, MRECW encourages an interdisciplinary approach to learning by facilitating collaboration between different subject departments. This approach fosters a broader understanding of complex issues and promotes interconnected thinking.
- **b.** Co-curricular Activities: MRECW focus on co-curricular activities, workshops, seminars, and guest lectures to help students to develop practical skills, critical thinking, and empathy.
- **c. Practical Projects and Innovative Product Development:** MRECW integrates hands-on projects and Innovative Product Development that allow students to explore and apply their learning to real-time scenarios.

# 3. Sustainable Development of Goals

- **a.** Collaborations and Partnerships: MRECW participate actively in collaborating with various agencies, and corporate organizations to enhance the impact of education and social related issues under NSS units.
- **b. Monitoring and Feedback:** MRECW continuously monitor the effectiveness of the integration and seek feedback from students, faculty, and other stakeholders to improve and adapt the approach over time.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

#### 1.3.2

Number of certificate/value added courses/Diploma Programmes offered by the institutions and online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms (without repeat count) where the students of the institution have enrolled and successfully completed during the last five years.

Response: 57

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format (data template)	View Document
Evidence of course completion, like course completion certificate etc	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 1.3.3

Percentage of programmes that have components of field projects / research projects / internships during the last five years.

Response: 100

# 1.3.3.1 Total Number of programmes that have components of field projects / research projects / internships (without repeat count) during the last five years

Response: 11

## 1.3.3.2 Total Number of programmes offered (without repeat count) during the last five years

Response: 11

File Description	Document
Sample Internship completion letter provided by host institutions	View Document
Sample Evaluated project report/field work report submitted by the students	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Program and course contents having element of field projects / research projects / internships as approved by BOS	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 1.4 Feedback System

#### 1.4.1

Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc., and Feedback processes of the institution may be classified as follows:

**Response:** A. Feedback collected, analysed, action taken & communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

## **Criterion 2 - Teaching-learning and Evaluation**

## 2.1 Student Enrollment and Profile

### 2.1.1

## **Enrolment percentage**

Response: 96.21

# 2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
1093	1074	1024	809	691

## 2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1131	1141	1068	828	708

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template)	View Document
Final admission list as published by the HEI and endorsed by the competent authority	View Document
Document relating to sanction of intake as approved by competent authority	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 96.74

Page 39/129 23-02-2024 10:28:39

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

2022-23	2021-22	2020-21	2019-20	2018-19
788	775	725	573	489

# 2.1.2.2 Number of seats earmarked for reserved category as per GoI/State Govt. rule year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
817	822	748	580	496

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template)	<u>View Document</u>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of the letter issued by the State govt. or Central Government Indicating the reserved categories(SC, ST, OBC, Divyangjan, etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document
Provide Links for any other relevant document to support the claim (if any	View Document

## 2.2 Catering to Student Diversity

## 2.2.1

The institution assesses the learning levels of the students and organises special Programmes to cater to differential learning needs of the student

## **Response:**

To address the issues of diversity in students' learning levels, the institution implements well planned

Page 40/129 23-02-2024 10:28:39

strategies. The students learning abilities are initially identified by their respective Faculty Counsellors based on their performance in the qualifying examination, entrance examination, earlier academic performance by verifying relevant documents and interaction with students individually, to assess their learning abilities, and further communicated to the concerned subject faculty. Based on these specific inputs, the students have specific attention by the respective subject faculty members, during their course work.

Later, based on the class performance and further the Mid-I Internal examinations, the students are actually divided into slow and advanced learners.

## **Special Programmes for slow learners**

- MRECW takes special attention of Slow learners, specially monitored beyond the regular class schedule in accordance with their specific needs to Improve the students level of learning, understanding concepts, problem solving, presentation and overall development. Parents are called in for additional help to their ward if necessary.
- Remedial classes are conducted with proper schedules to improve their performance.
- Slow learners are grouped with good performers to improve their level of learning abilities (Peer group Learning).
- The Faculty members also revise the topics as requested by the students, provide question bank and also train in answering the questions to score good marks.
- Students with poor soft skills and communication skills are identified by the English faculty and are given special emphasis for improvement to bring them on par with the regular learners.

#### **Assistance for weak students**

- Faculty regularly follow their progress and counsel them to attend the remedial classes.
- Remedial classes are conducted.
- Periodical tests are conducted and special assignments and tutorials are given.
- Help them to solve more number of problems related to different concepts.
- Faculty members inculcate theoretical concepts through interactive sessions.

## **Special Programmes for advanced learners**

- Advanced learners are recognized based on the academic performance, interaction in the theory and laboratory classes and encouraged them to become members of Professional bodies like IEEE,CSI and ISTE student chapters.
- Workshops in latest technologies & Full stack in different flatforms are arranged to improve Technical Skills.
- Coding abilities are enhanced by encouraging them to develop project.
- The advanced learners are catered to through Technical club activities, with special trainings in advanced technology encouraging them for Idea Presentations and Hackathons, active participation in all co-curricular activities and extra coding practice Realtime Project development.
- Advanced learners are also encouraged to take up additional courses like NPTEL, MOOCs and additional certification courses through Coursera, NASSCOM etc.
- The variation in performance of students is monitored constantly by the counsellor's, subject

faculty and class teachers for all round development.

• Creative quotient is developed with Idea Presentations & IPD's

### **Encouraging bright students**

- Students securing Top ranks in semester examination are awarded with certificate of merit and cash prize.
- Students are motivated for attending workshops, seminars, paper presentation and paper publications in national and international conferences and journals.
- Allowed to participate in National & State Level Technical fests.
- Encouraged to contribute towards newsletter sand magazines.

Students are encouraged to undergo Internships and Hackathons

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

### 2.2.2

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

Response: 18.13

File Description	Document
List showing the number of students in each of the programs for the latest completed academic year across all semesters	View Document
Certified list of full time teachers along with the departmental affiliation in the latest completed academic year.	View Document
Provide Links for any other relevant document to support the claim (if any)	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 experience and teachers use ICT- enabled tools including online resources for effective teaching and learning process

## **Response:**

The institution has well adopted experiential learning, participative learning and problem solving methodologies to ensure all round development of students and facilitate lifelong learning and knowledge.

### Participative Learning is Promoted Through

- 1. Hackathon participations with Design/Development of solutions to complex Real time engineering problems.
- 2. Idea presentations to provide students, the podium to explore and develop Novel ideas.
- 3. Encouragement to take Value added certification courses.
- 4. Two major project works taken up by final year students are related to research
- 5. Participation in professional Bodies activities of IEEE, ISTE, CSI and IETE.
- 6. Soft skills and communication skills proficiency through English lab sessions and Cambridge & Pearson certification.
- 7. Seminars presentations regularly for enhancement of presentation skills and technical knowledge base.

### **Experiential Learning**

- 1. Innovative Product development for creative Idea implementation in Technology Business Incubation Center.
- 2. Industrial/Field visits, practical Training/Internship at Industry.
- 3. Laboratory courses in the curriculum.
- 4. Project based Learning method by developing projects related to every lab course undertaken.
- 5. Mini projects and Major projects with Research Orientation.
- 6. Hackathon participations.
- 7. Project Exhibitions.
- 8. Mock Interviews.
- 9. Value Added Certification Courses like CISCO Certification through Cisco Networking Academy, Microsoft Certification through Microsoft Innovation Centre, Robotics Certification through Robotics Centre of Excellence, Robotics Process Automation Certification through BOTLAB in association with

Automation Anywhere university, Java Certification through Oracle Corporation as Oracle Academic Partner, Oxford Achiever's Certification through Oxford University Press, Business English Certification through Cambridge University.

## Problem Solving Methodologies adopted are

- 1. Giving Assignments and Tutorials with innovative Questions after each unit.
- 2. Case study Analysis and Discussions.
- 3. Coding practice through different learning platforms.
- 4. Innovative Product Development & Projects for real time problems.

# Teachers use ICT- enabled tools including online resources for effective teaching and learning process

- The institution has wide availability of computer systems in the departments and library with high speed internet access, smart classrooms with digital smart boards & internet facility in all class rooms, LCD projectors in all the laboratories, digital podiums and smart podiums in all the English Labs and Multimedia facilities in all the Auditoriums & Seminar halls.
- The faculty and students are trained for the efficient use of ICT Tools. Power Point presentations for all topics & video lectures are presented by the faculty and also made available to the students through faculty. YouTube Channels and Educational Websites.
- The BEES ERP software of the institution also provides a good platform to share all this information to the students. It also facilities issuing and receiving Assignments, Tutorials, PPTs and lecture notes.
- Microsoft Teams is the Institute's official online Meeting session, containing along with all the earlier features, the facility to conduct online classes & tests with effective proctoring system.
- ICT enabled Teaching-Learning process is supported with access to Digital Library, Online Courses (MOOCs, NPTEL etc.), Online Journals, Online tests, Use of Smart Boards, LCD Projectors for Class work, Lab sessions, Seminars and Workshops, productive use of educational videos and accessibility of all non-print material and digital notes for students.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide Link for Additional Information	View Document

#### 2.3.2

The institution adopts effective Mentor-Mentee Schemes to address academics and studentpsychological issues

#### **Response:**

MRECW follows effective Mentor-Mentee schemes to address academics and student-psychological issues

- MRECW provides personalized Mentor-Mentee Scheme to each and every student, the institute has a very actively functioning Counseling and Mentoring Cell, through which 20 students are attached to each faculty member for mentoring.
- The Scheme works with the vision, 'To produce highly skilled, world class engineers with great leadership abilities' and the mission, 'To motivate the students who are weak academically with highlighting their strengths and showing the know how to convert weaknesses into strengths and clear psychological issues.
- The functions of this Counseling and Mentoring Cell are to provide constant guidance and motivation to the students for Academic Excellence as well as participation in co-curricular and extra-curricular activities to improve technical abilities, communication skills, language proficiency, interpersonal skills, presentation skills, organization skills, time management skills and team spirit, to identify slow learners and give proper guidance for improvement and to conduct special counseling for hostellers to solve psychological issues.
- Counseling Registers are allotted for maintaining details of the group of 20 students are provided
  to the Mentors and Mentoring includes regular record of student attendance, performance,
  activities and results along with constant guidance and motivation to the students in academics as
  well as co-curricular and extracurricular activities. Constant rapport is maintained by the
  Counselor with the students.
- Slow learners typical candidates are identified, given proper guidance and also provided with Remedial Classes. Counseling is done once in every 15 days and the report is submitted to class teachers which would be further forwarded to counseling year in charges and then to overall incharges.
- Once every month, as per stipulated dates, the counselors meet overall Counseling incharge to explain progress of individual student. Also, Students are enquired regularly by Overall Counseling Incharge, about counseling being done, to identify whether the counseling process is in place without any deviation. Counselors are totally responsible for the progress performance of the 20 students in all aspects. So, they closely monitor the students give them constant guidance heart fully for fruitful outcome.

### **Total development (Mentoring covers all types of guidance)**

**Number of faculty members**: All the faculty in each programme

Number of students per mentor: 20 students from each year

**Frequency of meeting:** Thrice in Semester

Mentors address the concerns of the students that they may have during the course of their studies. Mentoring can help students to:

- Identify and clarify personal and professional goals
- Face challenges with greater ease and confidence
- · Get back on track when distracted

- Develop strategies and action plans that yield results
- Stay motivated and committed until graduation
- Finally students are achieved good placement with higher packages.

File Description	Document
Upload any additional information	View Document
List of Active mentors	View Document
Provide Link for Additional Information	View Document

#### 2.3.3

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

Describe the Preparation and adherence to Academic Calendar and Teaching plans by the institution.

#### **Response:**

### 1. Academic Calendar:

The Controller of Examinations in consultation with the Dean (Academics & Autonomous) and the Principal prepares the academic calendar after collecting the plan of action from Department and Section heads. The academic calendar ensures the smooth functioning of the institution.

The constraints of provision for 16 weeks of Instruction duration, in 2 spells with 8 weeks each per semester for U.G Programmes and 17 weeks of Instruction duration in 2 spells with 9 weeks in 1st spell and 8 weeks in 2nd spell for P.G Programmes, 1 week allocated for the Mid-1 & Mid-2 Internal examinations together, sufficient preparation holidays and practical examination days before the External End Semester examinations.

- The Academic Calendar includes the date of commencement of class work and last day of instruction, with durations of Instruction Spells, schedules of Internal and External examinations, Preparation holidays for external exams, date of Parent-Teacher Meet and Vacation periods.
- The Academic Calendar is printed and displayed in the Notice Boards and College Website.
- It is made available to the students before the commencement of class work.
- The Academic Calendars are approved by the governing Body and also approved/ratified by the Academic Council.

### 2. Teaching Plan

The Heads of the Departments collect the subject of interest for teaching from the faculty well in advance before commencement of the semester coursework and subject allocation is done accordingly. Unit-wise lesson plan of the course content with specified lecture hours is prepared by the faculty and submitted to the HOD before commencement of the semester which is verified for appropriateness.

The number of hours in the lesson plan is allocated based on the credits of the particular course.

The Academic plan is structured in accordance with the specifications to meet the needs of Outcome Based Education.

Course file inclusive of the Academic Plan is prepared by each individual subject faculty before commencement of the semester. The course file includes.

- Individual Time table
- Class Time table
- Syllabus copy as per Regulation
- Lesson plan
- Course objectives
- Course outcomes
- Mapping Course Outcomes(COs) with Programme Outcomes(Pos) and Programme Specific outcomes (PSOs)
- Unit wise notes
- Applications of each unit
- Tutorial and Assignments conduction
- Model Questions (Objective &Subjective)
- Model Assignment questions, Previous question papers and Mid question papers as per Bloom's Taxonomy level.
- Project related to subjects

During the semester, the Course-coverage and implementation of lesson plan by each faculty is monitored by the concerned HOD. Deviations if any, are clarified with the concerned faculty and necessary measures to overcome deviation are implemented.

The upcoming events for the Academic Year like Workshops, Expert Lectures, Conferences, Co curricular & extracurricular activities are also prepared in advance, at the beginning of the year to have a complete picture of the Academic scenario of the upcoming semester and to plan the teaching schedules accordingly.

The teaching plan execution and implementation is monitored timely by the respective HODs for smooth running of the Academics.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide Link for Additional Information	View Document

## 2.4 Teacher Profile and Quality

### 2.4.1

Average percentage of full time teachers appointed against the number of sanctioned posts year wise during the last five years

Response: 100

## 2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
225	196	178	152	146

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts).	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template merged with 2.4.3 and 2.4.4)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 2.4.2

Percentage of full time teachers with Ph.D./D.Sc. / D.Litt./ L.L.D during the last five years

Response: 39.56

2.4.2.1 Number of full time teachers with *Ph.D./D.Sc. / D.Litt./ L.L.D* during the last five years

Response: 125

File Description	Document
List of faculty having Ph.D./D.Sc. / D.Litt./ L.L.D along with particulars of the degree awarding university, subject and the year of award per academic year.	View Document
Institutional data in the prescribed format (data template merged with 3.2.3 and 3.4.2)	View Document
Copies of Ph.D./D.Sc. / D.Litt./ L.L.D awarded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

### 2.4.3

Average teaching experience of full time teachers (Data to be provided only for the latest completed academic year, in number of years)

## **Response:** 4

## 2.4.3.1 Total teaching experience of full-time teachers as of latest completed academic year

Response: 900

File Description	Document
Institutional data in the prescribed format (data template merged with 2.4.1 and 2.4.4)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 2.4.4

Percentage of full time teachers working in the institution throughout during the last five years

Response: 53.42

2.4.4.1 Number of full time teachers worked in the institution throughout during the last five years:

Response: 78

File Description	Document
Institutional data in the prescribed format (data template merged with 2.4.1 and 2.4.3)	View Document
Provide Links for any other relevant document to support the claim (if any)	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 last date of declaration of results during the last five years

## Response: 13

# 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

2022-23	2021-22	2020-21	2019-20	2018-19
12	12	12	13	16

File Description	Document
Result Sheet with date of publication	View Document
Policy document on Declaration of results (if any)	View Document
Institutional data in the prescribed format (data template)	View Document
Exam timetable released by the Controller of Examination	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

### 2.5.2

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

Response: 0.92

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

Page 50/129 23-02-2024 10:28:39

2022-23	2021-22	2020-21	2019-20	2018-19
26	30	29	24	40

# 2.5.2.2 Number of students appeared in the examination conducted by the institution year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
4049	3561	3178	2790	2641

File Description	Document
List of students who have applied for revaluation/re-totaling program wise certified by the Controller of Examinations year-wise for the assessment period.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

### 2.5.3

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

Describe the examination reforms with reference to the following within a minimum of 500 words

- Examination procedures
- Processes integrating IT
- Continuous internal assessment system

### **Response:**

The MRECW autonomous examination system of the institution is ably supported by a strong IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment.

## **Examination procedures:**

- The examination procedure is systematically organized with a specific set of activities, viz.,issuing notifications and time-tables; student registrations for examinations; conducting examinations; evaluation, announcement of results; revaluation and issue of marks cards.
- Eligible students are enlisted in the nominal rolls and are allowed to take midterm and semesterend examinations for any components of courses through the process of registration.
- As per the academic regulations, weightage is given to the performance in midterm exams and semester-end performance for all the courses.
- Seating plans for examination are prepared and members of faculty from departments are assigned for invigilation duties.
- Question paper setting & evaluation can be done by professors of reputed Universities & Autonomous Institutions
- Evaluation System is totally automated with Bees Examination Software. Answer books of the students are encoded (to maintain confidentiality/secrecy) and sent for external valuation. Examination system has automation package, to process the student marks, publish results and prepare necessary marks cards.

### **Processes integrating IT**

- The institution has used BEES EXAMINATION software TOOL (BET) for the management of the entire examination system commencing from course registration and ending with publication of results.
- A BET tool is also used to handle selected operations of the examination system such as results processing. The processes and procedures of the examination system are documented, reviewed by committees, and approved by competent authority.
- Improvements in processes and procedure are periodically introduced and approved by statutory bodies. The institution follows a continuous comprehensive evaluation system with absolute grading and CGPA based reporting of student performance.
- The BET tool is used in the management of course registration, attendance recording, entry of marks and calculation of internal marks, CO wise attainment calculations, collection and reporting of faculty feedback.
- The BET tool also supports for processing of end semester results, publication of results and the archiving of marks and grades. Co-creation of question papers, using experts for assessments are some of the important practices.

## **Continuous Internal Assessment system (**

- Continuous Internal Assessment (CIA) includes two mid term examination in a semester for each theory course and practical course, every practical exercise / experiment shall be evaluated based on the conduct of the experiment / exercise and the records to be maintained.
- There shall be compulsory, to keep the students engaged with the course content throughout the semester. The End Semester Examination (ESE), theory will be of three hours duration and will be conducted between November and December for the odd semesters and between April and June for the even semesters.
- The project to be completed in the final Year can be done as a team work. The examination for

Page 52/129 23-02-2024 10:28:39

the project work shall consist of the evaluation of the final report by an internal examiner followed by a viva-voce examination by external examiner.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide links as Additional Information	View Document

## 2.6 Student Performance and Learning Outcomes

#### 2.6.1

The institution has stated learning outcomes (programme and course outcome)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution

## **Response:**

In the strict compliance with the objectives of Outcome Based Education (OBE) and stated Program Outcomes (POs), the Program Specific Outcomes (PSOs) and Course Outcomes (COs) are framed by the department offering the concerned program after rigorous consultation with all faculty and the stakeholders. While addressing the students, the HODs create awareness on POs, PSOs and COs. The faculty members, class teachers, mentors, course coordinators, also inform the students and create awareness and emphasize the need to attain the outcomes.

The HODs, faculty members, class teachers, mentors, course coordinators, Module coordinators also informed to the studentsas 12 POs related to UG/PG programme, PSOs are created for specific individual departments based on the subjects which have been included and create awareness and emphasize the need to attain the outcomes to fulfill institute and departmental Vision and Mission.

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. Each subject/course has particular CO as per unit wise or relevant topics so that cumulatively four to five COs included.

The Vision, Mission, PO's, PSO' & PEO's are disseminated to all stake holders namely students, faculty, alumni & employers.

The Vision, Mission, PO's, PSO's & PEO's are published in

- 1. Institute Website: https://www.mallareddyecw.com/
- 2. Department Websites: https://www.mallareddyecw.com/department.html
- 3. Department Corridors.

- 4. Department Library.
- 5. Department Laboratories.
- 6. Institute Brochure.
- 7. Department Classrooms.
- 8. Department H.O.D Chamber.

#### **Attainment of CO's & PO's:**

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. The performance of the students in the examinations during the semester in each course is used to compute the level of attainment of the POs and PSOs through the mapping of COs to POs and PSOs.

The various assessment tools used to evaluate COs and in each course, the level of attainment of each CO is compared with the predefined targets, if is not the course coordinator takes necessary steps for the improvement to reach the target. With the help of CO against PO/PSO mapping, the PO/PSO attainment is calculated by the programme coordinator.

PO Assessment methods for a particular course include direct and indirect methods and are evaluated as per the rubrics framed. The process of program outcome assessment by the direct method is based on internal examinations, semester end examinations for both theory and practical courses. The indirect method is based on Course End Survey which will be taken after completion of a course. After completion of all courses assessment, overall assessment will be calculated to obtain the PO attainment of a particular programme.

File Description	Document
Upload POs and COs for all courses (exemplars from Glossary)	View Document
Upload any additional information	View Document
Provide links as Additional Information	<u>View Document</u>

#### 2.6.2

Pass percentage of students (excluding backlog students) (Data for the latest completed academic year)

Response: 95.86

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

Page 54/129 23-02-2024 10:28:39

## during the latest completed academic year:

Response: 811

File Description	Document	
Institutional data in the prescribed format (data template)	<u>View Document</u>	
Certified report from the COE indicating the pass percentage of students of the final year (final semester) eligible for the degree program-wise / year wise	View Document	
Annual report of Controller of Examinations (COE) highlighting the pass percentage of final year students	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

## 2.7 Student Satisfaction Survey

## 2.7.1

Online student satisfaction survey regarding teaching learning process

Response: 3.96

## Criterion 3 - Research, Innovations and Extension

## 3.1 Promotion of Research and Facilities

#### 3.1.1

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

### **Response:**

Malla Reddy Engineering College for Women (MRECW) demonstrates a strong commitment to research and innovation through its ongoing efforts to maintain and update research facilities and a transparent policy for research promotion. This dedication to research excellence is evident through the institution's practice of uploading and implementing its research policy on its official website.

**Frequently Updated Research Facilities:** MRECW's continuous investment in research infrastructure underscores its commitment to creating an environment conducive to cutting-edge research. By frequently updating research facilities, the institution ensures that students and faculty have access to the latest tools and equipment. This not only supports ongoing research activities but also encourages innovation and the pursuit of new knowledge.

**Transparent Research Policy:** MRECW's commitment to research promotion is further exemplified by the existence of a well-defined research policy. By making this policy transparent and accessible on the institutional website, MRECW ensures that all stakeholders, including students, faculty, researchers, and the wider community, can understand the principles and guidelines governing research activities within the institution.

**Implementation of Research Policy:** It's not enough to have a well-documented research policy; its implementation is equally important. MRECW's active implementation of its research policy demonstrates its dedication to ensuring that the stated principles are put into practice. This implementation may include mechanisms for research funding, ethics, collaboration, and the dissemination of research findings.

By actively implementing its research policy, MRECW fosters an environment where research is not just a theoretical concept but a tangible reality.

## **Benefits of Transparent Research Policy:**

**Promotion of Research Culture:** A well-defined and transparent research policy encourages a research culture within the institution. Students and faculty are more likely to engage in research activities when they understand the guidelines and support available. The MRECW institution possesses two research centers that have been officially acknowledged by JNTUH in the fields of ECE and CSE.

**Accountability and Ethical Conduct:** Transparency in research policies promotes accountability and ethical conduct. Researchers are aware of the expectations and responsibilities associated with their work, ensuring that research is conducted with integrity.

Page 56/129 23-02-2024 10:28:39

**Enhanced Collaboration:** A clear policy can also facilitate collaboration between researchers within the institution and with external partners. It provides a common framework for engagement, making it easier to initiate and manage research projects.

**Improved Resource Allocation:** Transparent research policies can help in the efficient allocation of resources, ensuring that research activities receive the necessary support and funding.

**Knowledge Dissemination:** When researchers understand the policies regarding knowledge dissemination and intellectual property, they are more likely to share their findings, contributing to the broader academic and scientific community.

In conclusion, Malla Reddy Engineering College for Women's commitment to maintaining updated research facilities and having a transparent research policy reflects its dedication to fostering a culture of research and innovation. By actively implementing this policy and making it accessible to all stakeholders through the institution's website, MRECW ensures that research is not only encouraged but also conducted with integrity, leading to valuable contributions to knowledge and technology.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide links as Additional Information	<u>View Document</u>

#### 3.1.2

The institution provides seed money to its teachers for research

Response: 23.31

# 3.1.2.1 Amount of seed money provided by institution to its teachers for research year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
4.18	5.35	6.96	2.20	4.62

File Description	Document
Sanction letters of seed money to the teachers is mandatory	View Document
List of faculty who have been provided with seed money for research along with the title of the project, duration and amount year-wise	View Document
Institutional data in the prescribed format (data template)	View Document
Audited Income-Expenditure statement highlighting the expenditure towards seed money endorsed by the Finance Officer	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 3.1.3

Percentage of teachers receiving national/international fellowship/financial support by various agencies for advanced studies/ research during the last five years

Response: 5.06

3.1.3.1 Number of teachers who received national/international fellowship /financial support by various agencies, for advanced studies / research; year-wise during the last five years

Response: 16

File Description	Document
List of teachers who have received the awards along with nature of award, the awarding agency etc.	View Document
Institutional data in the prescribed format (data template)	View Document
E-copies of the award letters of the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 3.2 Resource Mobilization for Research

#### 3.2.1

Total Grants research funding received by the institution and its faculties through Government

Page 58/129 23-02-2024 10:28:39

and non-government sources such as industry, corporate houses, international bodies for research project, endowment research chairs during the last five years (INR in Lakhs)

Response: 64.30

File Description	Document
List of Extramural funding received for research, Endowment Research Chairs received during the last five years along with the nature of award, the awarding agency and the amount	View Document
Institutional data in the prescribed format (data template is merged with 3.2.2)	View Document
Copies of the letters of award for research, endowments, Chairs sponsored by non-government sources	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 3.2.2

Number of research projects per teacher funded by government, non-government, industry, corporate houses, international bodies during the last five years

Response: 0.05

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

Response: 16

File Description	Document
List of project titles with details of Principal Investigator, amount sanctioned and sanctioning agency etc	View Document
Institutional data in the prescribed format (data template merged with 3.2.1)	View Document
Copies of the grant award letters for research projects sponsored by government agencies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 3.2.3

23-02-2024 10:28:39

## Percentage of teachers recognised as research guides as in the latest completed academic year

Response: 1.33

## 3.2.3.1 Number of teachers recognised as research guides as in the latest completed academic year:

Response: 3

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Institutional data in the prescribed format (data template merged with 2.4.2 and 3.4.2)	View Document

## 3.3 Innovation Ecosystem

#### 3.3.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

## **Response:**

MALLA REDDY ENGINEERING COLLEGE FOR WOMEN (MRECW) has successfully established a robust ecosystem for innovations and the promotion of the Indian Knowledge System (IKS). This ecosystem encompasses various components that collectively foster creativity, research, and the transfer of knowledge and technology.

Awareness about IPR (Intellectual Property Rights): MRECW recognizes the pivotal role of intellectual property in protecting and promoting innovation. To this end, the institution has actively instilled awareness about IPR among its students, faculty, and researchers. This educational effort has empowered the MRECW community to safeguard their ideas, inventions, and creative works. It has also led to a culture of respect for intellectual property rights, fostering a conductive environment for innovation.

**Establishment of IPR Cell:** MRECW's commitment to IPR is further underscored by the establishment of a dedicated Intellectual Property Rights (IPR) cell. This cell serves as a centralized hub for managing and protecting intellectual property assets generated within the institution. It provides guidance on patenting, copyright, trademarks, and other aspects of IPR. By offering support and resources for inventors and creators, the IPR cell has catalyzed a surge in innovation and research activities.

**Incubation Center:** One of the most pivotal components of MRECW's ecosystem for innovations is its Incubation Center. This center provides a nurturing environment for budding entrepreneurs, startups, and innovators. We encourage effective, low-budget public works projects because MRECW is an MSME Host facility.

**Technology Transfer Initiatives:** MRECW recognizes that innovations are only as valuable as their real-world applications. To bridge the gap between academia and industry, the institution has implemented effective technology transfer initiatives. This includes collaborating with industry partners to license or commercialize intellectual property developed by the institution. These initiatives have led to the creation of innovative products, services, and solutions that address real-world challenges.

**Research and Innovation:** MRECW places a strong emphasis on research and innovation across its academic disciplines. Faculty and students are actively engaged in cutting-edge research, with a focus on projects that align with national and global challenges. The institution encourages a culture of inquiry, curiosity, and experimentation, leading to the development of innovative solutions and technologies. The MRECW institution possesses two research centers that have been officially acknowledged by JNTUH in the fields of ECE and CSE.

**Industry Collaboration:** Recognizing that innovation thrives on collaboration, MRECW has fostered strategic partnerships with industry players. These collaborations facilitate knowledge exchange, research projects, internships, and employment opportunities for students. They also provide industry-specific insights, helping align the institution's research efforts with market demands.

The outcomes of MRECW's initiatives in creating an ecosystem for innovations and promoting the Indian Knowledge System are evident through its numerous achievements. These include a growing portfolio of intellectual property assets, successful projects incubated within the institution, a dynamic research environment, and valuable industry linkages. MRECW stands as a shining example of how an educational institution can drive innovation, protect intellectual property, and transform ideas into tangible solutions for the benefit of society.

File Description	Document
Upload any additional information	<u>View Document</u>
Link for Any other 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.

The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following:

- 1. Inclusion of research ethics in the research methodology course work
- 2. Presence of institutional Ethics committee (Animal, Chemical, Bio-ethics etc.)
- 3. Plagiarism check through software
- 4. Research Advisory Committee

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

File Description	Document
Institutional data in the prescribed format (data template)	<u>View Document</u>
Copy of the syllabus of the research methodology course work to indicate if research ethics is included	View Document
Constitution of the ethics committee and its proceedings as approved by the appropriate body	View Document
Constitution of research advisory committee and its proceedings as approved by the appropriate body.	<u>View Document</u>
Bills of purchase of licensed plagiarism check software in the name of the HEI	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 3.4.2

Number of candidates registered for Ph.D per teacher during the last five years

## **Response:** 5

## 3.4.2.1 Number of candidates registered for Ph.D during the last 5 years:

Response: 20

File Description	Document
Ph.D. registration letters/Joining reports of candidates.	View Document
Letter from the university indicating name of the Ph.D. student with title of the doctoral study and the name of the guide.	View Document
Institutional data in the prescribed format (data template merged with 2.4.2 and 3.2.3)	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

## 3.4.3

Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years

## **Response:** 2.45

# 3.4.3.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

Response: 774

File Description	Document	
Institutional data in the prescribed format (data template)	<u>View Document</u>	
Provide Links for any other relevant document to support the claim (if any)	<u>View Document</u>	
Link to the uploaded papers, the first page/full paper (with author and affiliation details) on the institutional website	View Document	
Links to the paper published in journals listed in UGC CARE list	View Document	
Link re-directing to journal source-cite website in case of digital journals	View Document	

### 3.4.4

Number of books and chapters in edited volumes published per teacher during the last five years

## **Response:** 2.51

## 3.4.4.1 Total Number of books and chapters in edited volumes published during the last five years

Response: 793

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 3.4.5

# Bibliometrics of the publications during the last five years based on average Citation index in Scopus/ Web of Science

**Response:** 5.74

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

**Response:** 9.5

File Description	Document
Bibiliometrics 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

Response: 57.87

# 3.5.1.1 Total Amount generated from consultancy and corporate training year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
4.25	53.62	0	0	0

File Description	Document
Letter from the corporate to whom training was imparted along with the fee paid.	View Document
Letter from the beneficiary of the consultancy along with details of the consultancy fee	View Document
Institutional data in the prescribed format (data template)	View Document
CA certified copy of statement of accounts as attested by head of the institution	View Document
Audited statements of accounts indicating the revenue generated through corporate training/consultancy.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 3.6 Extension Activities

#### 3.6.1

Outcomes of extension activities in the neighbourhood community in terms of impact and sensitizing the students to social issues and holistic development, and awards received if any during the last five years (Showcase at least four case studies to the peer team)

Describe the impact of extension activities in sensitising students to social issues and holistic development with four case studies within a maximum of 500 words

#### **Response:**

Extension activities, such as those conducted by the National Service Scheme (NSS), are instrumental in sensitizing students to social issues and promoting holistic development. The impact of these activities using the four case studies as:

1) NSS SPECIAL CAMP ON Primary Healthcare, Awareness on Covid-19 Vaccination, Cleanliness, Plantation, Child Education, Awareness on Government schemes by MRECW Students:

Case Study: Students from MRECW organized a special camp focusing on various social issues, including healthcare, COVID-19 awareness, cleanliness, environmental sustainability, and education for underprivileged children. They also educated the community about government schemes.

Impact: Through this comprehensive initiative, students not only gained a deeper understanding of these issues but also helped the community. They sensitized people about COVID-19 precautions, hygiene, and the importance of vaccinations. Child education and awareness of government schemes improved the

lives of many, while the cleanliness and plantation drives enhanced the environment.

## 2) Anti-Plastic Awareness Program by NSS Unit of MRECW College Students at Gundlapochampally Village:

Case Study: College students conducted an anti-plastic awareness program in a nearby village. They educated the villagers about the harmful effects of plastic and provided alternatives.

Impact: The students successfully raised awareness about the environmental hazards of plastic. Villagers reduced their plastic usage, leading to a cleaner environment. This activity also encouraged responsible consumption and promoted eco-friendly practices, instilling a sense of environmental responsibility in the students.

## 3) COVID-19 Measures - Masks & Sanitizers Distribution:

Case Study: In response to the COVID-19 pandemic, MRECW students distributed masks and sanitizers to vulnerable communities.

Impact: This initiative was critical during the pandemic, as it helped protect the health of many vulnerable individuals. Students gained a sense of purpose and responsibility while learning about the importance of community service in times of crisis.

### 4) Dental Camp under MRECW NSS Unit:

Case Study: MRECW NSS organized a dental camp where students provided free dental check-ups and basic treatments to underserved populations.

Impact: This camp not only improved the oral health of those in need but also enhanced the students' awareness of healthcare disparities. It sensitized them to the importance of accessible healthcare services and encouraged some to consider healthcare careers.

In all these case studies, NSS activities served as a platform for students to engage with and address pressing social issues. These experiences enriched the students' understanding of various concerns and enabled them to make a positive impact on their communities. The students not only contributed to society but also underwent significant personal growth.

These extension activities fostered empathy, social responsibility, and a deeper understanding of real-world problems. They also honed essential life skills, such as communication, leadership, and teamwork. By participating in such initiatives, students became more aware of their roles as responsible citizens and the importance of actively contributing to the betterment of society. These experiences, therefore, have a lasting impact on their holistic development.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide the link for additional information	View Document

### 3.6.2

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years

Response: 65

3.6.2.1 Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years.

2022-23	2021-22	2020-21	2019-20	2018-19
15	16	19	05	10

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format (data template)	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

### 3.7 Collaboration

## 3.7.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years

Response: 28

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activitywise and year-wise	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## **Criterion 4 - Infrastructure and Learning Resources**

## 4.1 Physical Facilities

#### 4.1.1

The Institution has adequate infrastructure and other facilities for

- 1. teaching learning, viz., classrooms, laboratories, computing equipment etc
- 2.ICT enabled facilities such as smart class, LMS etc.
- 3. Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.

### **Response:**

Institution has the required physical infrastructure and resources for the teaching-learning process. One of the top women colleges in Telangana State is Malla Reddy Engineering College for Women (MRECW) & which is established in year 2008. The college is permanently affiliated with JNTUH and within the area 10-acre of campus, with 8 undergraduate and 3 postgraduate programs are being offered by the college. Modern infrastructure at MRECW fosters a culture of advancement in education and professional growth.

#### **Classrooms:**

There are 66 Classrooms which are equipped with ICT facilities. LCD Projectors or Smart boards are available with Wi-Fi and LAN in every class room to facilitate effective Teaching-Learning. The classrooms are architecturally designed with optimal room for natural light and air.

#### Laboratories:

- The College believes in imparting strong practical exposure to the students.
- Modern laboratories contain LCD projectors with air conditioners
- Software that is both licensed and open-source are installed in computer labs.
- The College keeps upgrading the facilities and equipment in the laboratories.

### **Computing Equipment:**

The institute is maintaining 2:1 student computer ratio with 1970 computers for students. Every computer lab has a full-fledged UPS and also backed up with six generators.

#### **Cultural Activities:**

The college has Cultural committee comprising of faculty and students as members. The student members are formed into a group named Student Cultural Club (SCC). The Cultural Committee is having different clubs such as DANCE CLUB, SINGING CLUB, COMEDY CLUB and PHOTOGRAPHY CLUB.

## Yoga:

A certified yoga teacher leads sessions at the yoga center for both faculties and students. Team from BHRAMMA KUMARI's will visit the college to conduct stress free training for students and Yoga classes for faculty frequently.

#### **Meditation Centre:**

Institute has Meditation centre within the campus itself, Meditation can give a sense of calm, peace and balance that can benefit both emotional well-being and your overall health.

### **Sports & Games:**

At MRECW Students are encouraged to participate in a way that suits their interests and abilities. Students are encouraged to participate in Inter College Sports Competitions.

#### Outdoor Games:

- Cricket Stadium
- Basket Ball Court
- Volley Ball Court
- Throw Ball Court
- Tennis Court
- Tennicoit
- Kho Kho
- Kabaddi
- Short Put Court
- Long Jump

#### **Indoor Games:**

- Table Tennis
- Chess
- Caroms

### **Regular Annual Sports Events Organized:**

- TECHTROPHY: State Level Engineering Colleges Sports Meet
- CHAMPIONSHIPTROPHY: Intra College Sports Fest
- SPORTECHTROPHY: I year Sports Meet
- Intra College Sports Meets

### **Gymnasium:**

A huge indoor and outdoor gym facility with spaces designated for yoga, training with weights, exercising with weights, power lifting, and cardiovascular exercises is also available at MRECW.

#### **Auditorium**

The College has huge, well-furnished Auditorium (Einstein Block) with 2000 seating capacities and a Mini Auditorium with 200 seating capacities, Multimedia facilities & centralized air condition. They are equipped with latest technology for all types of audio / video presentations. The halls cater to the needs of various activities like cultural programmes, seminars, meetings, conferences, workshops etc

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

#### 4.1.2

Percentage of expenditure excluding salary, for infrastructure development and augmentation year wise during the last five years

Response: 19.97

# 4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
98.85	61.32	73.90	25.43	146.46

File Description	Document
Institutional data in the prescribed format (data template is merged with 4.2.2 and 4.4.1)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 4.2 Library as a Learning Resource

#### 4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the

## faculty and students

### **Response:**

Name of the ILMS software: New Gen Lib Helium Library Open Access Software (NGL)

Nature of automation (full or partial): Fully

Version: 3.2

Year of automation: 2016

The Central Library of Malla Reddy Engineering College for Women was established in the year 2008 along with the College and operated manually till the year 2016. The Library was automated in second semester of 2016 by using world famous New Gen Lib Helium Library Open Access Software—New GenLib(NGL) is an integrated library management system developed by Verus Solutions Pvt Ltd. New GenLib was declared free and open-source under GNU GPL. The latest version of New GenLib is 3.2 released in 2020.

- 1. Malla Reddy Engineering College for Women is a Knowledge hub for both faculties and students in Engineering and Management at both UG & PG level.
- 2. Library of Malla Reddy Engineering College for Women is data ware house which are holding 36462 volumes, 7633 titles, 122 print journals, magazines and e-journals, are available.
- 3. The Central Library is open from 9:30 AM to 6.00 PM on all working days and the working hours are extended during examinations.
- 4. The Central Library provides online Library services like on-line Journals/magazines, open course ware, open access Journals, Internet facility to the students and faculty with 1000 Mbps band width for faster access to the great extent.

### **Digital Library:**

- Digital library is functioning with 45 computers.
- All the subscribed e-resources like e-journals, DELNET, Digital Library, IEEE-ASPP, INFLIBNET, J-GATE, e-books, e-database, etc. are available which can be accessed through IP based and from remote location.
- CCTV cameras are installed to monitor the users. Also the fire extinguisher is placed in the library for emergency purpose.

### **Library Committee:**

The Library Committee is formed and the functions of the committee are as follows:

- To deliberate and advise on direction and development of policies for library and information service
- To support the library's efforts in ensuring financial accountability and responsibility.
- At the beginning of every academic year, the librarian gathers the necessary information from each HOD regarding the list of books, journals, and additional resources.

- Committee will review budget proposals for books and furniture for the development of the library.
- Computerized and automated maintenance of library is done on a regular and continuous basis.
- Librarian updates its books repository on a yearly basis as per the changes.
- Librarian submits the Annual report on the functioning of the library.

#### **Details of Library:**

S .No	Resources	Quantity
1	Total number of Volumes	36462
2	Total Number of Titles	7633
3	Total Print –National Journals	66
4	International Journals	56
5	E-Journals ( IEEE Xplore Digital	34777
	Library(ASPP) ,Springer	
	Collection, J-Gate-Engineering &	
	Management Collection)	
6	E-Books	2460
7	NPTEL Video Lectures	4157
8	Back Volumes	1860
9	Project Reports	1382
10	Total No. of DVD's &CD's	2334
11	Daily News papers	5
12	Reading room seating capacity	200
13	Total number of References	5645
14	Reprographic Facility	Available

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

#### 4.2.2

Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals year wise during the last five years

Response: 1.27

# 4.2.2.1 Expenditure for purchase of books / e-books and subscription to journals/e-journals year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
2.64	6.01	7.00	1.88	8.38

File Description	Document
Institutional data in the prescribed format (data template merged with 4.1.2 and 4.4.1)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for purchase of books/ e-books and subscription to journals/e-journals should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 4.3 IT Infrastructure

#### 4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

#### **Response:**

#### **IT Policy Statement**

The Academic process of Malla Reddy Engineering College for Women (UGC Autonomous) institute provides a large range of IT amenities and services with a state-of-the-art networking environment to support all students and staff for their learning, research, teaching and administration.

- The Institute has services like powerful central servers, web-based email application, Internet security system, anti-virus software and Network services.
- The IT Policy encompasses IT administration, hardware, software, networking, IoT, AI, database management, electronic communication system, IT usage, cyber security and maintenance guidelines. Sufficient annual budget allocation is made for the creation and maintenance of IT infrastructure.
- IT policy is implemented to develop facilities and update them periodically to keep abreast of changing times.
- Implementation of WLAN/wired network helps the faculty and students to connect easily within campus to the campus network without a wire. With this, all college blocks, laboratories, seminar halls and selected places in departments have excellent Wi-Fi connection at a speed of 500 Mbps and also inputs of CCTV/Video surveillance.

#### LAN and Wi-Fi:

- 1. Structured Network Cabling is in place to manage the entire network.
- 2. Campus is networked through 1000 mbps (LAN) and backbone connectivity is through 10 Gbps fiber.
- 3. All the computer labs are connected with 1 Gbps network switches with fiber optics as backbone connectivity.
- 4. Network Access list restricts to respective LANs only at the switching level.
- 5. Wi-Fi speed of 0.5 to 1.0 Gbps throughput is available in each block.

## **Cyber Security:**

- 1. To maintain privacy and to reduce the threat of crime protecting MRECW premises and safety of all the staff members, students and visitors, the video surveillance system shall be utilized.
- 2. Authentication based user access to connect internet.
- 3. Group-based security policy is assigned to different user groups to ensure that no threats are entertained.

Reports are regularly monitored in form Speed of Internet, Block wise Internets, Connections to Sessions and Band width Tested.

#### Roles and Responsibilities - Networking

- 1. Install, configure, test and maintain operating systems, application software and system management tools
- 2. Proactively ensure the highest levels of systems and infrastructure availability.
- 3. Maintain security, backup, and redundancy strategies.
- 4. Participate in the design of information and operational support systems
- 5. Should actively get involved in the Web maintenance and give appropriate suggestions when required.
- 6. Design, Monitor, Maintain, and Fix Computer System Networks of all sizes by acquire broad and extensive knowledge of Networking, Computer Systems, and Periphery Systems.
- 7. Install, Inspect, Secure and Troubleshoot networked Computers within the Institution. They operate a help desk, provide physical duties or monitor for internal and external threats by gaining extensive knowledge of Network Management.
- 8. Maintain the integrity and security of the Institute's Network and the Systems connected to it.
- 9. Take care of computer networking system having extensive knowledge of network connectivity, protocols, network security devices, network types, including wireless, fiber optic and common operating systems, such as Windows and Linux.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide the link for additional information	View Document

#### 4.3.2

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

Response: 2.16

# 4.3.2.1 Number of computers available for students' usage during the latest completed academic year:

Response: 1887

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 4.3.3

Institution has dedicated audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system(LCS) and related hardware and software for e-content development

#### **Response:**

In order to provide easiest way of accessing information through e-portal, the institute has established Studio Room with all required facilities. The centre is equipped with facilities like video editing, audio mixing and basic animation software's. With this facility in place, the institution is in a position to develop e-content and promote e-learning through online platform. The Studio Room is driven by a team of experts and skilled technicians who can handle the software and hardware with dexterity.

#### **Lecture Capturing System (LCS):**

Technology for recording and capturing lectures or presentations is called the Lecture Capturing System (LCS). Cameras, microphones, and recording software may be part of this setup to record the speaker as well as any slides or presentations that may be used as visual aids.

#### **Hardware and Software:**

The organization utilizes specialized hardware and software, such as high-end PCs, video recording equipment, audio processing tools, professional cameras, and microphones, to create and edit high-quality e-content. This investment is crucial in the digital era, where online education and multimedia materials are essential for communication and education. These facilities enhance students' experiences, facilitate efficient idea sharing, and support various media productions. For video editors and audio

mixing we are using the Vsdc /Movavi or Flixier is online video editor software.

## List of Equipments in Studio Room

S. No	Equipment Name	Quantity
1	Sony 4K HD Cam recorder	2
2	Spot Lights	12
3	Tripod Simplex Stand	6
4	Cam Link 4K Capture Card	2
5	Sony Memory Card	2
6	Wired Headset	2
7	Seagate Hard Disks 2TB	2
8	Wireless Mic Set	2
9	Movavi Video Editor Plus	2
10	MAXHUB E Series 65"	2
	Interactive Panel	

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

# 4.4 Maintenance of Campus Infrastructure

#### 4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years

Response: 51.64

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities of DDE and total expenditure excluding salary, year - wise, over the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
384.44384	142.87273	123.37767	97.96758	301.20272

File Description	Document
Institutional data in the prescribed format (data template merged with 4.1.2 and 4.2.2)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for maintenance of physical facilities and academic support facilities should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 4.4.2

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

Describe policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities within a maximum of 500 words

#### **Response:**

The organization has a structured system for maintaining and utilizing the facilities available at the MRECW Campus.

Standard Operating Procedures (SOP) for Maintenance Committees are framed to monitor the physical, academic, and support facilities.

S. No	Description
1	SOP for Infrastructure and Facility Maintenance
	Committee
2	SOP for Library Maintenance Committee
3	SOP for Sports Maintenance Committee
4	SOP for IT Infrastructure Maintenance Committee
5	SOP for Transport Maintenance Committee

#### INFRASTRUCTURE AND FACILITY MAINTENANCE COMMITTEE

#### **Building Maintenance:**

The individuals in charge of this committee are required to report to the Principal through the Administrator and oversee the following tasks:

- Civil Works: This includes building maintenance, repairs, painting, and furniture management.
- **Hygiene and Sanitation**: Responsible for maintaining campus hygiene and cleanliness, overseeing the drainage system, waste disposal, etc. Each department will have designated staff members addressing department-specific hygiene concerns, supervised by the respective Heads of Departments (HODs).
- Gardening and Horticulture: This involves tasks such as gardening, tree plantation, and enhancing the overall aesthetic appeal of the campus.
- Environmental Wing: Responsibilities here include rainwater harvesting, promoting sustainable green campus activities, and adopting environmentally friendly technologies.

#### **Electrical Maintenance:**

Power Supply and electrical maintenance are overseen by the Electrical and Electronics Engineering Department, with support from the electrician's team. This collaboration ensures the provision of reliable electrical power to the college. The department manages seven diesel generators with capacities of 125 KVA, respectively

#### **Equipments Maintenance:**

All the laboratories are spacious and well-lit. Do's and Don'ts, as well as safety precautions, are prominently displayed in each laboratory. All essential software, including Microsoft Office, browsers, lab-specific software, and antivirus programs, are installed and regularly maintained. The IT HELP DESK at MRECW is responsible for the upkeep of the computers. Periodical maintenance is systematically carried out in all laboratories.

#### SPORTS MAINTENANCE COMMITTEE:

The sports facilities at MRECW are overseen by the Physical Education Department. To ensure proper handling of sports items, both a stock register and an issue register are diligently maintained. Stock verification of sports items is conducted at the outset of each semester. The play area undergoes regular maintenance, supervised by the Director of Physical Education and the Faculty Sports Coordinator.

#### IT MAINTENANCE COMMITTEE:

The campus features an optical fiber backbone to facilitate interconnectivity between buildings, with each building having its LAN. The Server Room is under the supervision of the Network Administrator, who oversees the institute's networking facilities and computer maintenance. An IT help desk operates on the campus, addressing issues such as hardware troubleshooting, software installation, and the maintenance of biometric devices and network-related concerns.,

#### LIBRARY MAINTENANCE

There is a Library committee which helps in guiding the library for effective services. The library committee meets at regular intervals for selection of books and other Library material. They also suggest ways and means to improve the services. The files relevant to Library and Library services are well

maintained and labeled for easy access to any of the Library staff.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide the link for additional information	View Document

# **Criterion 5 - Student Support and Progression**

## 5.1 Student Support

#### 5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 57.22

# 5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
2468	2090	1752	1538	1484

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority.	View Document
Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).	View Document
Upload policy document of the HEI for award of scholarship and freeships.	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.1.2

Efforts taken by the institution to provide career counselling including e-counselling and guidance for competitive examinations during the last five years

#### **Response:**

MRECW's Career Guidance Cell plays a pivotal role in guiding students towards informed decisions about their academic and professional Career paths. The cell employs trained professionals to ensure a comprehensive and student-centric approach. Here are some key efforts and functions implemented by

Page 81/129 23-02-2024 10:28:40

MRECW to enhance effective career counseling and guidance for higher studies:

#### 1. Centralized Career Counseling Cell

MRECW has established a dedicated cell equipped with the necessary resources to provide centralized career counseling services The center is physically accessible for in-person sessions and is also equipped to provide e-counseling for students who may prefer remote assistance.

#### 2. Trained Professionals from GECF(G-Cell Sponsored by Government of Telangana)

The cell is staffed with trained and experienced professionals in the field of career counseling. These professionals possess the expertise to guide students through various career options, helping them understand their strengths, interests, and potential career paths

#### 3. Comprehensive Assessments

Career assessments, including aptitude tests and personality assessments, are conducted to assist students in identifying their strengths, weaknesses, and areas of interest. These assessments contribute to a more accurate career guidance process.

#### 4. Information Hub for Higher Studies

The center serves as an information hub for higher studies through Global Education and Careers Forum (GECF), providing students with up-to-date and relevant information about various academic programs, universities, and career prospects. This includes information about competitive examinations and admission processes

#### 5. Global Education Activities through GECF:

The cell actively engages in organizing global education activities through GECF. This includes Educational Fairs, seminars, workshops, and webinars with Academic experts from various Abroad Universities. These activities expose students to a diverse range of career possibilities and educational opportunities both nationally and internationally.

#### 6. Skill Development Workshops

In addition to academic guidance, the center conducts skill development workshops. These workshops focus on enhancing students' employability skills, such as communication, critical thinking, and problem-solving, ensuring they are well-prepared for the competitive job market. The "E-Summit" program is frequently organized by GECG, which also facilitates student connections with professionals. It helps the student to expose to understand the practical aspects of various career paths.

# 7. Awareness programs for Competitive Exams:

The cell organize sessions for competitive examinations such as CAT, MAT, GRE, TOEFL in association with GECF and TIME Institute as part of MOU. This allows students to familiarize themselves with the exam format, identify areas for improvement, and build confidence

**8.** Collaborative with ALUMNI: MRECW maintains strong connections with alumni through Alumni Association of the college. It conducts "Corporate to Campus Connect Program" in both online and offline mode through which our alumni provide valuable insights into different career paths.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide the link for additional information	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, self-employment and entrepreneurial skills)
- 4. Awareness of trends in technology

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

File Description	Document
Report with photographs on programmes conducted for awareness of trends in technology	View Document
Report with photographs on programmes/activities conducted to enhance soft skills, Language & communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.1.4

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

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

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee monitoring the activities and number of grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# **5.2 Student Progression**

#### 5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 86.38

# 5.2.1.1 Number of outgoing students placed and progressed to higher education during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
766	642	606	589	580

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.2.2

Percentage of students qualifying in state/ national/ international level examinations out of the graduated students during the last five years

(eg: NET/SLET/ Civil Services/State government examinations etc.)

Response: 2.77

# 5.2.2.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/SLET/Civil Services/State government examinations etc.) year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19	
24	23	22	18	15	

File Description	Document
List of students qualified year wise with details of examination and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 5.3 Student Participation and Activities

#### 5.3.1

Number of awards/medals for outstanding performance in sports/cultural activities at University / state /national / international Level events during the last five years

Response: 61

# 5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at University / state / national / international level events (award for a team event should be counted as one) year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
15	15	8	14	9

File Description	Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.3.2

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

Describe the Student Council activity and students' role in academic & administrative bodies within a maximum of 500 words

#### **Response:**

Student participation & representation in decision making is encouraged by the college for better academic environment in the institute through different academic and administrative bodies like:

**Internal Quality Assurance Cell:** Student representatives are involved in IQAC to manifest and promote the quality initiatives to be implemented in the institute.

**Executive Bodies of Professional Student Chapters:** like IEEE, ISTE, IETE & CSI and Co-curricular Activities Coordinators of each class, coordinate and conduct technical fests, Paper presentations, Code & Design Contests, Idea Presentations, Hackathons, Robotics Exhibition, Project exhibitions, Poster Presentations, Business Quiz Competitions, Elocution Competitions etc.

Class Review Committee: Each class has this Committee to review the academic activities, progress and improvement plans. Committee consists of Chair person, HOD, Class Teacher and 6 student representatives to discuss academic issues including conduction of class work, performance of students and students grievances.

**Antiragging Committee:** Student representatives organise Antiragging Campaigns for Ragging-free Campus.

Grievance Redressal Committee: Students coordinators take stand of student grievances.

**SC/ST Committee:** Selected SC/ST students are part of it, to take care of SC/ST students welfare.

**OBC Cell:** Selected OBC students are part of it, to take care of OBC students welfare.

**Minority Cell:** Selected Minority students are part of it, to take care of Minority students welfare.

**Alumni Association:** This committee organizes Alumni Meet every year & plays active role in contacting and updating Alumni Status and taking the help of alumni, to make the current students aware of the latest trends in the industry and also in placements preparation.

**Cultural Clubs**-Dance Club, Singing Club, Photography club & Extracurricular Activities coordinators from each class, organize intra & inter-collegiate Competions, Music Shows & Cultural Fests.

**Technical Clubs:** like AI&ML, ROBOTICS&IOT, BLOCKCHAIN Technologies, Amazon Web Services, Java and Python Clubs. These clubs host regular trainings, workshops, expert lectures, events and hackathons to create opportunities to members to expand knowledge, skills&abilities in multiple,rapidly advancing technological horizons.

**Sports Committee:** Student representatives give valid suggestions towards the sports activities and also address the adequacy of infrastructure and other facilities. They organise State Level, Inter & Intra College Sports Meets.

**Women Protection Cell Committee:** Students are made part of the committee to address issues related to women welfare.

**Library Committee:** The student coordinators are consulted in procurement of new titles, volumes and other additional learning resources.

**EDC & Innovation Cell Club:** coordinates events and activities to motivate the innovation and Entrepreneurship in the college.

**NSS**: Coordinators organise activities like Go-Green Plantation Programmes, Anti -Plastic Awareness Programme, Dental Health Check-up Camps, Blood donation etc.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

#### 5.3.3

The institution conducts / organizes following activities:

- 1. Sports competitions/events
- 2. Cultural competitions/events
- 3. Technical fest/Academic fest
- 4. Any other events through Active clubs and forums

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

File Description	Document
Report on Sports, Cultural competitions/events, Technical/academic fests, Any other events through active clubs and forums along with photographs appropriately dated and captioned (whichever is applicable)	View Document
List of students participated in different events year wise signed by the head of the Institution	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of circular/brochure indicating such kind of activities.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# **5.4 Alumni Engagement**

#### 5.4.1

Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution through registered Alumni association:

## Response: 51

# 5.4.1.1 Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution year wise through registered Alumni association:

2022-23	2021-22	2020-21	2019-20	2018-19
9.41564	34.49700	0.846	0.14857	6.093

File Description	Document
List of alumnus/alumni with the amount contributed year-wise	View Document
Annual audited statements of accounts of the HEI highlighting the Alumni contribution duly certified by the Chartered Accountant/Finance Officer	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.4.2

Alumni contributes and engages significantly to the development of institution through academic and other support system

Describe the alumni contributions and engagements within a maximum of 500 words

#### **Response:**

#### Alumni contribution

**Aim:** The main aim of the MRECW Alumni Association is to provide a purpose and commendable connection among the students, faculty and the institute for mutual benefit and synergy.

#### **Objectives:**

- To keep a register of all Alumni of the MRECW and their relevant data.
- To maintain close relations among the alumni.
- To promote a lifelong relation and to act as a forum for the exchange of information among the members.
- To exchange professional knowledge, organize technical conferences, seminars workshops training courses. To provide career development and guidance.
- To maintain and update the data base of the alumni of the college and to interact with them.
- To utilize the rich experiences of old students of the college for the benefit and progress of the present students.
- To provide guidance to the pursuing students in their endeavour for better employment and higher studies.
- To promote the campus placements through the old students working in reputed industries in India and abroad. Be a part of Board of Studies for Syllabus Upgradation from Industry point of view.

#### **VISION:**

MRECW Alumni Association shall serve as a platform in building a professional network driven by the ideals and values, to improve current and future professional integration and motivational capital for MRECW and its students.

#### **MISSION:**

- To connect the existing alumnus with the College and bridge the gap of communication between alumnus and students.
- To promote exchange of academic and corporate experience with the students.
- To mentor and channelize the efforts of the students seeking better opportunities to learn and grow.
- To promote a goodwill and sense of pride to both alumni and students.
- To advice and conduct activities that shall motivate and provide scope.
- To associate with the MRECW management in planning an increasingly broad and diverse network.

• To suggest new technologies and improvements that shall set a benchmark for industrial expectations.

The MRECW Alumni association has a good linkage between institute and alumni and the association has 6000 plus as members.

The MRECW Alumni association aspires to connect alumni with the institution, build synergistic plans to help the institution realize its vision, and enable the institute to add value to all of its stakeholders. The alumni association aids in the development of a network of alumni as well as keeps in touch with the business world. Every year, the Alumni Association will conduct an Alumni Meet, where alumni from all branches will be welcomed to express their thoughts and suggestions on the scope of their course, as well as to raise knowledge of the professional world. This allows alumni to reconnect with one another and share their prior experiences and memories.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide the link for additional information	<u>View Document</u>

# Criterion 6 - Governance, Leadership and Management

## 6.1 Institutional Vision and Leadership

#### 6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

#### **Response:**

Malla Reddy Engineering College for Women (Autonomous)'s governance reflects its vision, mission, goals, and quality policy.

#### **VISION:**

- Visualizing a great future for the intelligentsia by imparting state-of the art Technologies in the field of Engineering and Technology for the bright future and prosperity of the students.
- To offer world class training to the promising Engineers.

#### **MISSION:**

- To nurture high level of Decency, Dignity and Discipline in women to attain high intellectual abilities.
- To produce employable students at National and International levels by effective training programmes.
- To create pleasant academic environment for generating high level learning attitudes.

The Mission Statement proposed by the Institute accommodates the new paradigm - "Education for total transformation" with a commitment for excellence in all that we do. "Knowledge and Skills", "Honourable living" and "Societal and Economic Growth" are central to the Institute's approach to teaching.

Faculty involvement in governance is very important to the institution's success. The institution has qualified experienced administrators to provide effective leadership and management at various levels to implement NEP-2020 which are clearly mentioned in Vision, Mission and Goals of the institution.

The Leadership is ensured by clear methods and a structure that adhere to AICTE guidelines, UGC autonomy policies, JNT University, Hyderabad regulations, and the institution's overarching vision and purpose.

Various committees such as Governing Body, Academic Council, Finance Committee, Boards of studies etc., are constituted as per UGC and AICTE Guidelines.

The administration of the college involves the academics and staff in the process of creating and implementing the management system. Faculty members are given leadership roles in the institute by

Page 91/129 23-02-2024 10:28:40

being nominated to serve on several statutory organizations and committees. Ideas are invited from alumni and other stakeholders for innovation and improvement in various functions such as Academics, Industry Interaction and Placements etc.

To fulfil the institute's vision and objective, the leadership regularly audits, checks, and monitors academic and administrative policies and procedures utilizing a well-defined Quality Assurance Framework to promote continuous improvement.

#### **Decentralized and Participative Management:**

The institution assigns tasks from top to bottom for management, administration, finances, and academics.

Regulatory organizations require the Governing Body, Academic Council, Finance Committee, and Board of Studies to perform specified duties.

Principal promote learning and manage academics. Principal ensures balanced, high-quality education. Principal manages Institute growth and strategy. Deans and HODs support college operations. Several committees plan, coordinate, implement, and monitor all institution activities.

A case study, the E-Summit '23 Start-up Expo, exemplifies this participatory approach. The event's success stems from the collaboration of faculty and student committees. Faculty-led committees handled aspects like brochure preparation, invitations, hospitality, registration, finances, and logistics. Meanwhile, student committees managed hospitality, registration, and stage decoration.

The summit featured Mrs. Rama Devi Kanneganti, Chairperson of the Atal Incubation Centre at ALEAP We-Hub, Hyderabad, who addressed delegates and students, highlighting opportunities and challenges for young entrepreneurs.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide the link for additional information	View Document

# **6.2 Strategy Development and Deployment**

#### 6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies are effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

#### **Response:**

The institute follows a well-defined Organisation with a hierarchical structure, which makes participatory

Page 92/129 23-02-2024 10:28:40

administrator easier.

The principal as head of the institution carries out academic administration and management through well-established statutory/non-statutory bodies. In accordance with the rules of the institution, the following organisational structure and decision-making processes are in place for enhancing the overall effectiveness. The institution governance is managed through various administrative bodies.

### The institutional perspective plan is effectively deployed

- Institution has a strong Strategic plan aiming at clearly formulated objectives.
- Achieving Academic excellence by curriculum design.
- Innovative research and knowledge exploration for social needs.
- Improving all round Personality of the students with Global Vision & Social responsibility.
- Establishing Centre of Excellence.
- Excellence in Research, Innovation and Creativity for high impact.
- Enhancing relations with industry, alumni, and society.
- Enhancing employability and promoting entrepreneurial initiatives.
- Committed to social, economic, and environmental sustainability.
- Ensuring excellence in Organisational Leadership and governance.
- Ensuring excellence in Organisational Leadership and governance

The plan is implemented through daily activities, resource allocation, and stakeholder engagement. Periodic performance and quality indexes help achieves strategic goals. To achieve long-term goals, the Institute's IQAC examines Strategic Plan and Policy implementation and makes corrections. The perspective plan evaluates the institution's mission, vision, and goals. The Strategic Plan ensures aims are met through assessment, evaluation, reporting, and re-planning.

#### **Governing Body:**

The Governing Body is responsible for managing the organization and approving important documents including the annual budget and long-term plan. The institution is well known for its good administrative practices and work culture.

#### **Academic Council:**

The academic council is academic body of the institute and responsible for the maintenance of standards of education, teaching, learning and training, interdepartmental coordination, research, continuous evaluation methodologies such as examinations and tests within the institute and shall exercise continuously on students admission policy and procedures, training and placement activities, alumni interactions, value added course design and implementation for skill enhancement of students, approval of new programme with student support facilities and curriculum feedback from stake holders, analysis and action taken way forward. Innovation Eco-system including Research & Development activities, Collaborations with Institute and Industry, Internships and Skill Development Activities is also implemented.

#### **Board of Studies:**

Prepare syllabi for various courses keeping in view the objectives of the college, interest of the

stakeholders and national requirement for consideration and approval of the Academic Council.

#### **Finance Committee:**

The Finance Committee will advise the Governing Body on budget estimates for grants, fees, etc. collected for autonomy activities, and audited accounts.

A well-structured administrative setup includes the highest decision-making Governing Body and several functional bodies and committees.

The website provides more information about body functions.

#### Service rules, Procedures, Recruitment and Promotional Policies:

The Institute has a set of well-established rules, policies and regulations within the frame work of AICTE, UGC, State Govt. and the affiliating university, which are approved by the Governing Body of the Institute.

File Description	Document
Upload any additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document
Provide the link for additional information	View Document

#### 6.2.2

Institution implements e-governance in its operations. e-governance is implemented covering the following areas of operations:

- 1. Administration including complaint management
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examinations

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

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

### **6.3 Faculty Empowerment Strategies**

#### 6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

#### **Response:**

The College uses a structured self-evaluation process to evaluate the performance of both Teaching and Non-Teaching Faculty members. Faculty members are required to fill out information on their academic, administrative, research and consulting activities during the course of the academic year in order to be evaluated for further training, pay raises and promotions.

Faculty in higher education must undertake many responsibilities for different roles. In addition to teaching, faculty must innovate and research for self-renewal, keep up with technology, and build curriculum implementation skills. They must also assist the industry and community in solving real-world problems. Another function involves administrative duties and collaboration with other faculties, department heads, and the institute head. A good faculty performance rating system maximizes individual faculty contributions to institutional performance.

The College follows the Performance Based Appraisal System as prescribed by the UGC.

The system was adopted after a thorough discussion and review.

The purposes of this evaluation are following Assess and Promote excellence in the teaching/learning process.

- Meet the educational needs of students and community by continually monitoring instructional performance.
- Provide a constructive framework for evaluating faculty performance by identifying areas of strength and areas for improvement in classroom instruction.

• Provide a basis for professional growth and development.

#### **Basic Criteria for Appraisal System:**

#### ? Teaching Based Appraisal:

- Percentage of Assigned Classes taken.
- Projects supervised.
- NPTEL course.
- Innovation in teaching pedagogy.
- Number of Guest Lectures/Workshops/Seminar organized for the students.
- Designing of new courses / Revision of courses.
- Extra activities carried out with regard to slow and fast learners.
- MOOC courses completed.
- Course Files
- Attainment of Course Outcomes (COs).
- Awards/ Recognitions received for excellence in teaching/ research/ students' projects.

#### ? Research Based Appraisal:

- Papers published in SCOPUS Indexed Approved journals.
- Outside Consultancies completed during the assessment period.
- Conference organized by the college during the assessment period.
- Papers presented at Conferences, Seminars, Workshops, Symposia, Trade Journals (National/International).
- Membership of Chapters such IEEE, Institute of Engineers etc.
- Funded Research Projects
- Initiatives and Outreach activities.
- Conduct of Training Programs (FDP/Workshop) should be the Organizer.

The Institution provides good welfare for teachers and non-teachers. Statutory welfare measures apply. Employees are satisfied with monetary and non-monetary personal and professional measures.

#### The various welfare schemes are as follows:

- Maternity benefits as per norms
- · Child Care
- Management rewards the faculty members to improve their research output through excellent publications during the academic year with research incentives.
- Subsidized medical facilities
- Employees are covered under EPF.
- Non-teaching staff are provided with ESI facilities.
- Concessional on Transport and Medical facilities for all the staff.
- Sports, gym and yoga facilities are provided for staff.
- ATM facilities are available in the campus.
- Medical Insurance
- Group Life Insurance.

Students can document their research project reports in Communication Lab. The communication lab will enable faculty write and read project reports, research papers, etc.

The incubator centre's equipment and software will enable faculty to advise students in product development innovation and participation in national/international competitions/hackathons, which is a career milestone.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

#### 6.3.2

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

Response: 28.09

# 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

2022-23	2021-22	2020-21	2019-20	2018-19
95	53	19	23	62

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences/workshops and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 6.3.3

Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the last five years

Response: 48.61

# 6.3.3.1 Total number of teachers who have undergone online/ face-to-face Faculty Development Programmes (FDP)/ Management Development Programs (MDP) during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
155	60	86	58	77

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

## 6.4 Financial Management and Resource Mobilization

### 6.4.1

Institutional strategies for mobilisation of funds other than salary and fees and the optimal utilisation of resources

Describe the resource mobilisation policy and procedures of the Institution within a maximum of 500 words

#### **Response:**

At the start of each financial year, the administration at Malla Reddy Engineering College for Women (Autonomous) develops a strategy for allocating available funds most effectively.

#### Finance team:

The management members, principal, finance manager and budget committee monitor the utilization of resources

#### **Funds for the COLLEGE:**

Funds have been received from the student fees, government and Non-Government agencies. The major source of revenue for the college is the Annual fee collected from students. The fee is collected as per the fee & guidelines fixed by the Telangana State fee regulatory authority.

#### Interest on corpus fund

#### **Budget Planning:**

Every year the Heads of the Department, Administrative Officer and librarian have to submit the budget requirements to the management through proper channels. Finance and Budget committee analyses the submitted documents and reports the optimal summary to the Governing Body for approval. The approved Budget proposal is effective thereafter. The allocated funds are utilized to purchase equipment, computers, software's, chemicals, consumables, non-consumables, machineries, etc.,

The finance committee review the use of resources, placing of the quotations and the purchase orders. It monitors and audits the budgets, utilization, expenses, accounts etc. They make recommendations for better handling of resources and effective mobilization of available funds. It ensures that the fund utilization is within the limit or allotted margin. Based on the recommendation from the Principal and based on the need, funds also allotted beyond the budget, because the management always supportive to skill enhancement programs to students, and faculty.

#### **Optimal utilization**

After approval from Board of Management, finance & budgeting committee utilizing funds under different categories, such as purchase of books, equipment, sports, salary, incentives and up-gradation of staff, miscellaneous expenses and for certain emergency situations, various programs like FDP, seminars, Guest lectures, Workshops, Conferences, Meetings, Stationary, Remuneration/Honorarium, Security, Staff Welfare, Vehicle Maintenance, Building Maintenance, Computer Maintenance, AMC of drinking water, Gardening Maintenance, library maintenance, Office maintenance, student training programs and the placement related activities, Wi-Fi, etc.,

#### **Secondary Resources for Funds**

Additional funding has been sanctioned from various research agencies such as AICTE, UGC, SERB etc., for approved project proposals submitted by various departments. Also, funds have been received from the industries for doing the consultancy services. These funding enables the purchase of sophisticated equipment, upgrades the labs, establish new research facilities and carry out research projects. After the completion of the proposed project, utilization certificates are prepared and submitted to the respective funding agencies.

File Description	Document	
Upload any additional information	View Document	
Provide the link for additional information	<u>View Document</u>	

#### 6.4.2

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

Response: 23.22

# 6.4.2.1 Total Grants received from government/non-government bodies, philanthropists year wise during last five years (not covered in Criterion III and V) (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
4.976	0	10.98334	7.25999	0

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Copy of the sanction letters received from government/ non government bodies and philanthropists	View Document
Annual audited statements of accounts highlighting the grants received	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 6.4.3

Institution regularly conducts internal and external financial audits regularly

Enumerate the various internal and external financial audits carried out during the last five years with the mechanism for settling audit objections within a maximum of 500 words

#### **Response:**

Financial Planning is exercised well in advance for the organization and efficient Budgeting &

Controlled mechanism is done by involving the various Academic Departments and Administrative Sections of the Institute.

Financial Rules are in place in the Institute and "No- Cash" Transaction System is followed. Optimal utilization and execution of the budget is monitored through internal and external auditing.

Internal and external audits play distinct but complementary roles in ensuring the financial integrity, compliance, and overall health of an institution. The importance of internal and external audits lies in their ability to provide a multifaceted assessment of an institution's financial health, operational efficiency, and compliance, ultimately fostering trust and confidence among stakeholders.

Internal audit is conducted on yearly basis and the statutory external audit is conducted annually by charted accountants. All funds received from government are audited separately by the Auditor appointed by government.

The MRECW is administered through MRGI, adheres to all the Government of India regulations, issued from time to time and follows accounting standards as laid down by the GOI.

The institute has a full-fledged accounts department handling the accounting processes. The account section is fully computerized and all financial transactions are made only through banks and no cash transactions are entertained. To ensure the smooth flow of financial transactions, the institute conducts internal and external audit.

#### **Internal Audit**

All bills and vouchers are audited annually by an internal financial audit committee comprising of Principal, Dean of Administration, Accounts Officer and Accounts Assistants. The Mechanism for Internal Audit is described below:

The internal audit committee will confirm the sources of income and expenditure information, as well as bills that are due and owing, and will determine any deductions made in accordance with the law, including those for Income Tax, Tax withholding at the source (TDS), Provident Fund (PF), Professional Tax (PT), and GST paid by vendors.

If any inconsistencies or discrepancies are found in the invoices, vouchers, and financial records given by the relevant internal stakeholders, the internal audit committee lodges an objection and requests an explanation and correction of the problem. The documents will be re-examined for authenticity and rejected or approved as appropriate after correction and re-submission in compliance with the legislative criteria.

#### **External Audit**

The accounts of the college are audited by chartered accountant regularly as per the government rules. The auditor ensures that all payments are duly authorized after the audit, the report is sent to the management for review. Any queries, in the process of audit would be attended immediately along with the supporting documents within the prescribed time limits. All these mechanisms exhibit the transparency being maintained in financial matters and adherence to financial discipline to avoid defalcation of funds or properties of the institution at all levels. The audited statement is duly signed by

the chartered accountant.

File Description	Document	
Upload any additional information	View Document	
Provide the link for additional information	<u>View Document</u>	

## 6.5 Internal Quality Assurance System

#### 6.5.1

Internal Quality Assurance Cell (IQAC)/ Internal Quality Assurance System (IQAS) has contributed significantly for institutionalizing the quality assurance strategies and processes, by constantly reviewing the teaching-learning process, structures & methodologies of operations and learning outcomes, at periodic intervals

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)

Describe two practices institutionalized as a result of IQAC initiatives within a maximum of 500 words

#### **Response:**

The Malla Reddy Engineering College for Women (Autonomous) Internal Quality Assurance Cell is to enhance the quality of teaching-learning and performance. A dedicated Internal Quality Assurance Cell was established as per guidelines. The IQAC has helped develop, assess, follow up, and set up quality indicators and periodically review quality procedures.

Some of the strategies adopted by the IQAC for institutionally quality include:

- Development of Learning Management System
- Attendance monitoring and feedback through SMS
- Examination reforms-Blooms Taxonomy
- Orientation towards MOOCs
- Alignment with NBA & NAAC quality initiative
- Project Based Learning
- Conduct of co-curricular & extra-curricular activities through committees/cells
- Innovative Product/Project Development;
- Usage of ICT Tools

- Online Training Programs with industry experts
- Research & Development committee encourages the faculty and students to participate in Conferences, Seminars, and Technical competitions etc.,
- Industry Interaction
- Induction Program for newly appointed faculty

Among these, two institutionalized best practices stand out:

#### **Best Practice 1: Counselling and Mentoring**

Support weak students and encourage bright students to minimize dropouts, improve performance, and reduce stress.

#### Practice.

- The institute has a very active Counselling and Mentoring Cell that matches 20 students to each faculty member for personalized counselling.
- Counsellors receive a Counselling Register to track the 20 students' attendance, performance, activities, and results and provide academic, co-curricular, and extracurricular guidance and motivation.
- They meet at least once a month to discuss, clarify and share various problems which may be personal or academic, etc.
- The mentors encourage the students to participate in co-curricular and extracurricular activities and sports.
- Their academic performance and other activities are all recorded.
- The mentors also counsel the students in need of emotional problems.
- Mentors take special care of weak students, who are given advice on how to study, prepare a time table for study and clarify the doubts and also given notes to study.
- Students problems are discussed with the departmental heads, other faculties and necessary action taken to solve it.

#### **Evidence of Success**

Evidence of success of the practice includes university ranks, better results in the examinations, improved attendance, less drop outs, increased participation in co-curricular and extracurricular activities, better discipline on campus and respectful relationship between teachers and students.

#### **Best Practice 2: Problem-Based Learning/Innovative Product Development**

- Employ problem-based learning to foster innovative product development. Approach:
- Real Problem Identification: Define real-world problems for students to address in product development.
- Team Collaboration: Encourage interdisciplinary teamwork mirroring real-world scenarios.
- Research and Analysis: Engage in extensive research, critical thinking, and problem-solving.
- Idea Generation: Encourage creativity in brainstorming potential solutions.
- Prototyping and Testing: Develop, refine, and improve prototypes based on feedback.
- Presentation and Reflection: Refine communication skills through solution presentations.
- Feedback and Iteration: Continuously refine solutions based on feedback received.

- Evaluation and Application: Assess solutions based on innovation, feasibility, and functionality.
- Holistic Skill Development: Enhances problem-solving, collaboration, creativity, and communication skills.
- Real-world Application: Provides insights into market research, design thinking, and the innovation process.

These practices have significantly contributed to improved academic performance, reduced dropout rates, increased student engagement, and the holistic development of essential skills for professional success.

File Description	Document
Upload any additional information	View Document
Provide the 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

Describe any two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC within a maximum of 500 words each.

#### **Response:**

The institution's innovative approaches to teaching and learning are reviewed annually by IQAC through an academic audit, and include the following:

- The IQAC organizes regular academic audits to ensure effective implementation of teaching learning process and maintenance of course files.
- All new students must attend the Orientation Program, which introduces them to the education system, teaching and learning process, continuous evaluation system, core courses, cocurricular activities, discipline, and culture of the Institute. College facility awareness program for students.
- Before each semester begins, students are given information on the semester's course schedule and syllabi.
- Lesson Plans are prepared by the concerned teachers prior to the beginning of the semester.
- Faculty efficiently utilize ERP Software BEES-LMS to upload course materials and related information.
- Teachers and students are making use of the many video classes hosted on our website to improve their subject-matter expertise.
- Lecture material is prepared and is given to the students as reading material.
- SMARTBOARDS are used in all the class rooms for teaching.
- HOD periodically monitors teacher's lesson plans and suggests corrective measures if needed.
- Verification of internal test analysis, question papers.
- Arrangement of special classes for weak students during evening hours.
- Identifying the new processes/delivery method and recommending the same for improving the

quality.

- Encouraging faculty for online certification Courses, FDP, Skill Development Training Programmes.
- Analysis of results and CO-PO attainments are carried out at the end of semester and scope for further improvements are discussed.
- Student feedback improves teaching-learning performance. Online student feedback on teaching and learning is collected twice a semester.
- Feedback from the stakeholders (students, alumni, industry experts, and parents).

#### Reviews and Implementations of Teaching-Learning Reforms through IQAC:

- Guest lectures on advanced topics by the eminent academicians and industry experts.
- Practice of emerging technologies through mini projects and term projects.
- Faculty development through workshops, orientation programs, seminars and conferences.
- Corrective action measures on CO and PO analysis.
- MoUs with prestigious Institutes, Universities, Govt. agencies
- Conducing AAA department wise

#### **Practice-1: Course Files**

Course files provide objectivity and organize teaching and learning for each topic. Teachers check that all students meet course prerequisites. Each topic is planned and taught by the teacher. Topic-specific revisions are scheduled by the teacher. Course and program outcomes are mapped. Teachers get clarity from course files. It covers all course units, teaching plan, pedagogies, handouts, revision questions, tutorial materials, course beyond syllabus, accomplishment sheets, mid question banks, internal and external model question papers.

#### Practice-2: English – LSWR Skill Enhancement with Value Added Certifications

The institution offers certifications in Cambridge English Empower Advanced, Oxford Achievers, and Pearson MePro to enhance language skills (Listening, Speaking, Writing, and Reading). These certifications validate language proficiency, offer global recognition, enhance skills, and provide avenues for career and educational advancement. Faculty training and dedicated language labs ensure students benefit significantly, enabling them to excel in academic and placement tests.

These approaches incorporate a holistic teaching-learning environment with a strong emphasis on structured planning, continuous improvement, faculty development, and student-centric methodologies, culminating in an enriched educational experience.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

6.5.3

## Institution has adopted the following for Quality assurance:

- 1. Academic and Administrative Audit (AAA) and follow up action taken
- 2. Conferences, Seminars, Workshops on quality conducted
- **3.** Collaborative quality initiatives with other institution(s)
- 4. Orientation programme on quality issues for teachers and students
- 5. Participation in NIRF and other recognized ranking like Shanghai Ranking, QS Ranking Times Ranking etc
- 6. Any other quality audit recognized by state, national or international agencies

### **Response:** B. Any 4 of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document

# **Criterion 7 - Institutional Values and Best Practices**

# 7.1 Institutional Values and Social Responsibilities

#### 7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

#### **Response:**

MRECW being 100% women students and 60% (170) women faculty institution, the safety and security of girl students is a prime concern of our college. This institution is dedicated to ensuring the safety and security of its female students and fostering a supportive and inclusive environment. The practices and measures implemented are essential for promoting a safe and conducive learning environment. Here is a comprehensive summary of the initiatives taken by the institution under each category:

#### A) Curriculum:

- Inclusion of the mandatory course on Gender Sensitization.
- Lectures on various topics such as the importance of education, women's rights, and domestic violence.
- Regular cultural activities and celebrations to promote gender equity and awareness.
- Annual celebration of International Women's Day, along with inviting inspiring women personalities to share their life experiences.

#### **B) Safety and Security:**

- Provision of a secure parking lot and secured hostels within the campus.
- Comfortable classroom arrangements for students.
- Functioning of aGrievances Redressal Cell, and Internal Complaints Committee (ICC), Anti-Ragging committee, Disciplinary committee to address issues and ensure student welfare.
- Rotational duty by all faculty members for discipline and security.
- Presence of a security wing with guards, CCTV surveillance, and strict implementation of safety measures such as anti-ragging policies and a mobile-free campus.
- 24x7 ambulance service and immediate medical assistance for students.

#### **C)** Counseling:

- Establishment of a Mentoring and Counseling Cell, providing general and specialized counseling services.
- The provision of psychological counseling services by a specialized counselor,
- Arrangement of counseling programs and activities focusing on women's safety and empowerment.
- Allocation of counselors for personalized guidance and mentorship, with a focus on overall

personality development and goal achievement.

• Confidential handling of grievances and complaints with the involvement of ICC and designated women faculty members.

#### D) Common Room:

- Availability of sick rooms in every block, equipped with necessary amenities for students' health and well-being.
- Attentive faculty members providing immediate medical assistance and facilitating medical facilities as required.
- Providing of Auditoriums for cultural activities and meetings
- Yoga Center
- Gym facility in College and Hostel.
- Round Table Rooms.
- Play Ground for Sports.

The institution's emphasis on holistic development and support for its female students is crucial for their growth and success. The integration of these practices ensures a nurturing and secure environment, enabling students to thrive academically and personally.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	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
- 6. Wind mill or any other clean green energy

**Response:** A. Any 4 or more of the above

File Description	Document
Geo-tagged photographs of the facilities.	<u>View Document</u>
Bills for the purchase of equipment's for the facilities created under this metric	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	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

#### **Response:**

Malla Reddy Engineering College for Women has designed methods for the management of waste generated in the campus using the basic waste management strategy of 3R's: Reduce, Reuse and Recycle i.e., Reduce the amount of waste generated, Reuse everything to its maximum after proper segregation and cleaning and keeping things which can be Recycled aside and handed over to appropriate agencies. The waste generated in the campus include liquid waste and solid waste- both of biodegradable and non-biodegradable nature & chemical waste. No classified hazardous waste is generated in the campus. The environmental policy of the institute is to achieve zero discharge and complete utilization of wastewith well-designed strategies to make campus clean, hygienic and healthy. For the collection of waste, floor wise separate bins are kept. For the recycle/reuse of used paper collected and used both sides for office purpose and official drafts. Garbage is segregated into wet and dry bins. Canteen and Hostels wet garbage is disposed of in the composting plant prepared specially for this purpose in the institute. Solid waste include, paper, plastics, metal cans etc and are sold for recyclers and Biodegradable waste includes food waste, vegetable peels, leaves etc. are disposed of in four dumping yards specially earmarked for the purpose.

The waste is generated by all sorts of routine activities carried out in the College that includes paper, plastics, glass, metals, foods, etc. The waste is segregated at each level and source. The administrative supervisor in each block ensures that the waste in each floor is collected at designated time intervals. The block safai workers in each floor collect, clean, segregate and compile the waste in the dustbins (Green and Blue) provided at each floor. The floor dustbins are emptied in movable containers/dustbins provided for each block and is taken to the dumping yard provided by the College.

#### **Liquid Waste Management:**

Liquid waste that is generated in the institute falls into three following categories.

- Septic tank effluents from various sanitary blocks, water used for washing and cleaning of utensils etc. from canteen
- Wastewater from laboratories using chemicals
- Wastewater from RO plant

#### **E-Waste Management:**

The College has taken MOU with EARTH BOX for proper disposal of all kinds of electronic waste, such as batteries, cells, obsolete electronic devices, computers, monitors and printers, UPS etc. e-waste management and disposal committee members take initiatives to manage the waste in the campus. The major sources of e-wastes at our college are outdated computer monitors, printer cartridges, mouse, keyboards, etc.. These are periodically disposed back to the suppliers through buy back schemes. Refilling of the printer cartridges is done outside the college campus. We use network printer in our computer lab to reduce the number of independent printers.

E-waste from different sections of the units are collected and dumped at one place, which is sold to authorize e-waste vendor. Students are also educated by faculty member on proper e-disposal methods .AsMRECW has been signed an MOU with EARTHBOX for the Collection of E-waste from the organization.

File Description	Document	
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document	
Geo-tagged photographs of the facilities	<u>View Document</u>	
Any other relevant information	<u>View Document</u>	

#### 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

**Response:** A. Any 4 or more of the above

File Description	Document	
Green audit reports on water conservation by recognised bodies	View Document	
Geo-tagged photographs of the facilities	<u>View Document</u>	
Bills for the purchase of equipment's for the facilities created under this metric	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

#### 7.1.5

#### Green campus initiatives include

Describe the Green campus initiative of the institution including Restricted entry of automobiles, Use of Bicycles/ Battery powered vehicles , Pedestrian Friendly pathways , Ban on use of Plastic, landscaping with trees and plants etc in 500 words

#### **Response:**

Malla Reddy Engineering College for Women, Autonomous Secunderabad, demonstrated higher sensitivity and responsibility in implementing green concepts in the campus. Although establishment and maintenance of green campuses is important, spreading awareness on the green practices among students and educating stake holders is our priority.

Malla Reddy Engineering College for Women (UGC Autonomous), Maisammaguda, Secunderabad. Fairly manages water resources, waste management, solar and electric energy, conserve natural resources and provide eco-friendly and solar passive building, minimal paper use. Institute implementing following practices towards establishment and maintenance of green campus.

#### Policy Responsibilities and Steps of Green Campus Program

- 1.MRECW will constitute a Green Campus Committee to regulate the implementation of this policy. It will be a representative of campus community directing the campus involvement in the program.
- 2. The Committee, will conduct a campus review from environmental and Green Campus perspective to identify targets for improvement.
- 3.MRECW will develop an action plan based on Green Campus Committee inputs with achievable targets with completion dates and responsibilities.
- 4.MRECW will establish proper mechanisms for monitoring and evaluation of Green Campus program to ensure that progress towards targets is checked and amendments made wherever necessary.
- 5. MRECW will link the Green Campus activities/program to learning on campus.
- 6.MRECW will communicate its activities involving the wider community through publicity, awareness raising and focused outreach.
- 7.MRECW will develop a guidance document on how to manage 'Green Campus' as a Green Charter.

#### The policy advocates green initiatives and commitments towards, but not limiting to:

- 1. Formation of Green-Campus Committee at different levels of university management, staff, students and local community for execution and monitoring of green initiatives and impact monitoring at campus.
- 2. Awareness on biodiversity conservation and protection through group meetings, field visits, nature interpretation centers
- 3. Conducting events on important environmental days to promote environmental sustainability
- 4. Improving green cover through afforestation of local habitats using sound ecological methods and practices.
- 5. Promote a plastic-free campus through plastic collection drives, reducing disposable plastic use through awareness creation.

- 6. Establish a zero-waste culture on campus by integrating it into education curriculum and other activities on campus, so members of the campus community will leave as Zero Waste leaders.
- 7. Improving sanitation and hygiene through enabling access of tools for sustainability
- 8. Initiate waste management through primary action of reducing campus waste generation and management of campus waste by utilizing on-site waste processing green systems such as composting, biogas, biological waste water treatment, systems for pre-processing and recycling of recyclable waste.
- 9. Water and other natural resource management through initiatives such as rain waste harvesting, recharge pits, reduction in paper use, utilizing regional and organic food sources, etc.
- 10. Energy conservation through maximization of energy efficiency and using sustainable energy sources, utilizing energy efficient equipment, etc.
- 11. Enhancing sustainability in land-use and building planning
- 12. Encouraging low fossil-fuel transport such as use of bicycle, electrically driven vehicles and/or by developing no-vehicle zones on the campus.
- 13. Promoting environmentally and socially responsible development and investment.
- 14. Create environmentally friendly physical infrastructure, institutional practices and personal behaviors that will foster public health and well-being.

File Description	Document	
Policy document on the green campus/plastic free campus	View Document	
Geo-tagged photographs/videos of the facilities	<u>View Document</u>	
Circulars and report of activities for the implementation of the initiatives document	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

#### 7.1.6

Quality audits on environment and energy are regularly undertaken by the institution

The institutional environment and energy initiatives are confirmed through the following

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

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

File Description	Document	
Report on environmental promotion and sustainability activities conducted beyond the campus with geo-tagged photographs with caption and date.	View Document	
Policy document on environment and energy usage Certificate from the auditing agency	View Document	
Green audit/environmental audit report from recognized bodies	View Document	
Certificates of the awards received from recognized agency (if any).	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

#### 7.1.7

The Institution has Differently-abled (Divyangjan) friendly, barrier free environment

Write description covering the various components of barrier free environment in your institution in maximum of 500 words

- Built environment with Ramps/lifts for easy access to classrooms
- Divyangjan friendly washrooms
- Signage including tactile path, lights, display boards and signposts
- Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

#### **Response:**

Malla Reddy Engineering College for Women's established in the year 2008, As MRECW which took upon itself the responsibility of enriching the society through promotion of education, literature and culture. Malla Reddy Engineering College for Womenensures that creating a differently-abled (Divyangjan) friendly and barrier-free environment in an institution is not just a legal requirement but also a moral and social responsibility. Such an environment ensures equal opportunities, inclusivity, and accessibility for all individuals, regardless of their physical abilities. The premier status of the institution is made possible by sticking core –principles of student focus, human resource development and emphasis on total quality. The institution's humanitarian policy balances professional as well as ethical values by setting a secured and friendly environment to the differently abled individuals, conveying that people with disabilities are not object of clarity but have the same rights and dignity like any other individual

Here is a comprehensive description covering various components of a barrier-free environment in our institution:

- Architectural Accessibility: The institution prioritizes architectural features that facilitate ease of movement for individuals with different abilities. Ramps are strategically placed at entrances and exits, eliminating the need for stairs. Doorways and corridors are widened to accommodate wheelchairs and mobility aids. Elevators are installed and properly maintained to provide access to different floors. Signage is clear, written in large fonts, and includes Braille for individuals with visual impairments.
- Accessible Restrooms: Restrooms within the institution are designed to be accessible to individuals with disabilities. This includes wider entry doors, sufficient space for wheelchair manoeuvrability, and grab bars for support. Washbasins are installed at appropriate heights to ensure easy access for everyone.
- Sensory-friendly Spaces: Recognizing the needs of individuals with sensory sensitivities, the institution has designated quiet spaces. These areas are designed to minimize sensory stimuli, providing a calm and comfortable environment for those who may be easily overwhelmed by noise or bright lights.
- Inclusive Classroom Design: Classrooms are designed to be inclusive, considering the diverse learning needs of students. Teaching materials are provided in multiple formats, such as printed, digital, and audio, ensuring that students with different abilities can access information in a way that suits them best.
- Transportation Accessibility: The institution ensures that transportation services are accessible to all. This may involve having wheelchair-accessible vehicles, trained staff to assist individuals with mobility challenges, and clear communication about accessible transportation options.

The institution is committed to fostering an environment where individuals of all abilities can thrive. By addressing physical, technological, and attitudinal barriers, the institution aims to create a truly inclusive and accessible space for learning, working, and socializing.

#### **Objectives:**

- 1. To ensure that students with disabilities get equal opportunities to explore their educational potentials.
- 2. To provide a nurturing and motivating environment for students with learning disabilities to accommodate their pedagogic needs.
- 3. To eradicate any kind of stigmatization and segregation so that they can become confident individuals.

File Description	Document	
Upload any additional information	<u>View Document</u>	
Provide the link for additional information	<u>View Document</u>	

#### 7.1.8

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance

Page 114/129 23-02-2024 10:28:41

and harmony towards cultural, regional, linguistic, communal socioeconomic and such other diversities (within 500 words).

#### **Response:**

MALLA REDDY ENGINEERING COLLEGE FOR WOMEN, AUTONOMOUS believes in "unity in diversity. Our campus is located in city limits of the district. Our campus has pro-actively made efforts to promote diversity. Students from different states, religions, languages and cultures are encouraged to take part in events across campus. This gives a feeling of 'home away from home' for these students, in the campus and hostels. It has taken various initiatives for promoting tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities. The Institution has conducted several programs like Technical fest - FUTURE SASTRA, MEDHA Cultural Festival -AHLAAD, Sports Festival-SPORT TECH TROPHY creates a platforms for diversified participation in campus.Regional festivals cultural like Bathukamma, Sankranthi, and Durgapuja, Holi, Christmas, Ganesh Chaturthi, etc are celebrated in the campus. Separate prayer rooms are made available for namaz in the campus. National holidays, tributes to famous Indians such as Sarvepalli Radhakrishnan, Mokshagundum Visveswaraya, Dr APJ Abdul Kalam and Mahatma Gandhi are honoured with tremendous enthusiasm. To cater to the linguistic diversity, all student related competitions like Essay Writing, Elocution are conducted.

Food is one of the important aspect of culture, is given high priority and food is provided according to their cultural beliefs and practices. The Food festin the campus also cater to the palate of the diversity of students from within and outside the state. Inclusive spaces are created across the campus for the students to meet and greet each other. The college also promotes and supports students from different linguistic background by associating a suitable mentor to each student. This helps majority of the students from underprivileged backgrounds and alien culture to take the advantage and participate with other students in various activities.

Our campus is equipped with facilities with lift and ramp for wheel chairs which are useful for differently abled people to study and work. Regular gender sensitization programs and counselling sessions are conducted for the students, staff and faculty to create an inclusive environment across our campus. Our college takes utmost care when dealing with students in daily activities. Our college also encourages 'inclusion' to give preference to students from rural and under-privileged backgrounds in consonant with our vision and mission statement 'empowering women community'. Faculty and Staff recruitment is also done in keeping in view linguistic diversity of students. The college has a separate authorized NSS Unit-1 and unit-2 under JNTUH. The Unit conducts field trips and social camps in the nearby villages (Go Green, Anti Plastic, Save Girl Child, Nutrition Awareness, Self Defence for Women, Dental Camp, Medical Camp-awareness on PCOD/PCOS for young girls) to build the spirit of Social Responsibility in the students through social service. In these camps, volunteers come to know about the ground realities of the society. Through NSS Unit our institution mitigate the socioeconomic diversities and progress them towards leading to a tolerant and harmonious living. College is offering training sessions for Skill & Personality Development Program courses in soft skills, business communications, coding skills and career planning.

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

Describe the various activities in the Institution for inculcating values for being responsible citizens as reflected in the Constitution of India within 500 words.

#### **Response:**

Malla Reddy Engineering College for Women (MRECW) educates staff members and students on their constitutional responsibilities. Through a variety of curricular and extracurricular activities, Malla Reddy Engineering College for Women (MRECW) raises awareness of values, rights, obligations, and responsibilities and continuously strives to make students better citizens of the nation. Malla Reddy Engineering College for Women (MRECW) curriculum includes classes designed to raise awareness of constitutional duties. Staff and students are scheduled for motivational speeches to raise awareness of constitutionally connected tasks. During national festivals, flag hoisting ceremonies are held, and distinguished individuals are invited to motivate employees and students. These notable individuals discuss freedom fighters and highlight the obligations and responsibilities of citizens. Every national festival is celebrated with cultural activities, including the performance of patriotic plays and songs.

In addition to this many regular programs are conducted by Institute Innovation Council (IIC)

cell of the institute to educate women about their rights. Also seminars and workshops are conducted on days of national importance on various rights, duties and responsibilities of citizen.

Seminars on topics like Right to Information, Sexual Harassment, and Gender Equity are conducted periodically.

The students of MRECW of all branches study Indian Constitution, Human Values And Professional Ethics, Intellectual Property Rights, Indian Traditional Knowledge and Environmental Studies asmandatory subjects whichsensitizes the students about constitutional obligations. Every year Republic Day is celebrated on 26th Jan by organizing activities highlighting the importance of Indian Constitution. Independence Day is also celebrated every year to highlight struggle of freedom and importance of Indian constitution

#### 1. Symbols and National Identities:

The college helps students learn about constitutional ideals by hosting annual celebrations of holidays like Constitutional Day, Engineers Day, Women's Day, Republic Day, National Science Day and

Page 116/129 23-02-2024 10:28:41

Independence Day. Malla Reddy Engineering College for Women (MRECW) arranges a number of events to instill moral principles and raise staff and student awareness of their rights, obligations, and responsibilities.

#### 2. Fundamental Duties and Rights of Indian Citizens:

Fundamental Duties and Rights of Indian Citizens: The Faculty of various departments, have organized various academic and co-curricular activities for the propagation of the Fundamental Duties and Rights of the Indian citizens. The students of have enthusiastically participated in various programs like:

- Academic programs like Seminar, Conferences, Expert talks, etc which have enriched the awareness about these aspects.
- Various activities like poster making competition, etc.
- Organizing Annual Competitions on various contemporary legal issues.
- Organizing various forms of legal aid and legal awareness camps to impart awareness of such issues

#### 3. Constitutional Obligations:

Malla Reddy Engineering College for Women has organized student centric activities like paper, poster & essay competition displays at annual Synergy event etc. Which have always received huge participation from the students and promoted their awareness about various aspects of Indian citizenship.

File Description	Document
Details of activities that inculcate values necessary to nurture students to become 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 institutional Code of Conduct principles are displayed on the website
- 2. There is a committee to monitor adherence to the institutional Code of Conduct principles
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

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

File Description	Document	
Report on the student attributes facilitated by the Institution	<u>View Document</u>	
Policy document on code of ethics.	View Document	
Handbooks, manuals and brochures on human values and professional ethics	View Document	
Document showing the Code of Conduct for students, teachers, governing body and administration as approved by the competent authority.	View Document	
Constitution and proceedings of the monitoring committee.	View Document	
Circulars and geo-tagged photographs with date and caption of the activities organized under this metric for teachers, students, administrators and other staff	View Document	
Provide Links for any other relevant document to support the claim (if any)	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

#### **Response:**

#### **BEST PRACTICE-1**

Malla Reddy Engineering College For Women, Autonomous adopted two villages INDIRAMMA COLONY and GUNDLA POCHAMPALLY, under the National Service Scheme (NSS) Units 1 & 2 commendable commitment to holistic community development. With a strong emphasis on healthcare, environmental sustainability, and addressing various social issues students while significantly contributing to the well-being of the adopted villages.

The objectives of the practice reflect a multifaceted approach, envisioning reflexive and socially useful development through village adoption. The primary goals include creating awareness about health, sanitation, and a hygienic environment, conducting surveys to identify and address basic problems, promoting a clean and green environment, and raising awareness about government schemes. Additionally, the program aims to identify the potential for further growth in the adopted villages, instill social human values in students, and involve them in social upliftment to foster leadership qualities.

Page 118/129 23-02-2024 10:28:41

The contextual backdrop reveals a genuine commitment to holistic development not only within the college but also extending to the surrounding neighbourhoods. The choice of adopting villages, namely INDIRAMMA COLONY from BAHADURPALLY gram panchayat and GUNDLA POCHAMPALLY, primarily consisting of scheduled and other backward classes, underscores the program's commitment to inclusive development in semi-urban areas with multiple neighbouring villages.

- NSS Unit 1 & 2 conducted comprehensive village surveys in collaboration with local authorities and social workers to identify and prioritize concerns and requirements. The subsequent organization of health, environmental, and social awareness drives, including medical camps, demonstrates a hands-on and proactive approach to addressing identified issues.
- The health-related initiatives encompassed a wide areas, such as awareness of women's health issues, dental care, mental health, and nutrition. Through these medical camps, the program not only provided immediate healthcare solutions but also facilitated ongoing awareness and prevention strategies.
- Environmental initiatives included awareness programs on organic and natural farming cultivation technologies, emphasizing sustainability and ancient farming techniques. Plantation drives, anti-plastic campaigns, and advocating for clean surroundings underscored the commitment to environmental consciousness.
- Addressing social issues, the program conducted awareness programs on traffic rules and safety, gender equality, the importance of education for girls, and initiatives against child marriage and dowry. These efforts were complemented by skill development programs and support for economically disadvantaged students.

The evidence of success is substantial, with tangible outcomes and positive impacts on both students and the adopted villages. Engineering students designed innovative products addressing real-time problems, villagers actively participated in environmental initiatives, and there was an increased commitment to eco-friendly practices. The program's success is further reflected in the positive health outcomes for villagers, the resolution of identified issues through collaboration with local authorities, and the heightened awareness of social responsibility among students.

In conclusion, the "Adopted Two Villages" practice is a holistic and impactful model for community engagement, showcasing the potential of engineering students to contribute meaningfully to societal development. Through a combination of awareness programs, surveys, and innovative solutions, the program not only addresses immediate concerns but also lays the foundation for sustained and inclusive growth in the adopted villages.

#### **BEST PRACTICE-2**

Malla Reddy Engineering College for Women, Autonomous, continuously focusing on value-added certifications in technology and communication, represents a strategic effort to enhance the knowledge and employability of students. The Skill for Employability & Enhancement of Knowledge(SEEK), is designed to bridge the gap between industry and academia, providing students with essential skills demanded by the job market.

Malla Reddy Engineering College for Women has devised a comprehensive four-year roadmap to provide the right skill sets at the right time. The college offers a range of skill development activities for students across different streams. These include employability skills enhancement training programs, CRT online assessment tests, value-added certification training programs through various centers,

professional English certification training programs, project-based training programs, programs on entrepreneurship, IPR, and innovations, and finishing school concepts.

#### Objectives of the Practice:

- Industry-Academia Bridge: Build a bridge between industry and academia to align educational outcomes with industry needs.
- Job-Oriented Training: Provide training in trades with high demand in the market, emphasizing Python, Java, and C with Data Structures.
- Technical Skills Development: Conduct tutorials and programming lab practices using platforms like Code Tantra, Hacker Rank, and Hacker Earth. Implement timed programming tests to simulate real placement scenarios and assess student skill sets.
- Individual Performance Reports: Provide students with individual performance reports to track progress and identify areas for improvement.
- Self-Confidence Boost: Maximize potential and boost self-confidence through skill development activities and training.
- Overall Development: Ensure overall development of students through appropriate skilling mechanisms and methods. Enhance the ability to use modern engineering tools necessary for engineering practice.
- Real-Time Application: Provide opportunities for students to apply classroom concepts in real-time situations in both virtual and physical settings.
- Market-Ready Skills: Enrich market-ready skills through certifications from platforms like Coursera, NPTEL, Cisco, and others.
- Aptitude Enhancement: Enhance students' IQ levels through aptitude practice-related training.
- Soft Skills Development: Conduct seminars to expose students intensively to topics, enhancing their soft skills before entering the industry.
- Practical Knowledge in Networking and OS: Inculcate practical knowledge in computer networking and operating systems through Cisco certifications.
- Specialized Training Sessions: Provide additional training sessions in Full Stack, Machine Learning, and Deep Learning to meet industry needs.
- English Communication Certifications: Develop Language, Speech, Writing, and Reading (LSWR) skills through certifications from Cambridge, Oxford, and Pearson.

Malla Reddy Engineering College for Women's initiative in technology and communication certifications reflects a proactive and strategic approach to preparing students for the demands of the evolving job

market. By incorporating a diverse range of training programs, certifications, and real-world applications, the college is ensuring that its students are equipped with both technical and soft skills, making them valuable assets to prospective employers. The continuous alignment with industry needs and technological advancements positions the SEEK program as a model for other institutions seeking to enhance the employability of their graduates.

#### 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

#### **Response:**

## **Skill Development Programs for Placements**

The workforce is always on the lookout for students who are bright, vivacious, willing to take on new challenges, focused, quick learners, and, most importantly, receptive to learning even in the workplace. These days, industries adopt distinctive hiring practices to ensure that those hired will

fulfil its prerequisites. The Training & Placement Cell understands that these methods through engaging with the business community and equipping students with them. Our Training & Placement Cell is special in that it makes sure that the hiring procedure is a fruitful journey for the

MRECW students. It places a strong focus on pre-placement instruction, both technical and non-technical, that will prepare students to succeed at recruitment and interview procedures. The Training and placement cell focus on various skill development programs for personality development of students.

# Malla Reddy Engineering College for Women is always forefront to improve the skillset of the students. Our aim is to

- 1. To provide training in various trades that are in high demand in market and have good job prospects.
- 2. Timed programming tests, so as to serve as a mock test for the actual placement process and meter the student skill set.
- 3. Maximizing their potentialities and boosting self-confidence.
- 4. To ensure overall development of students and scholars with the help and support of appropriate skilling mechanisms/methods and modes.
- 5. To enhance the ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- 6. To provide an opportunity to students to practice the concepts learnt in a classroom, in real-time situations/company/organisation/industry in both virtually and physically means.
- 7. To enhance the IQ levels of the students with aptitude practice related training.
- 8. Seminars gives the students an intensive exposure on a topic trough the presentations and discussions which enhances soft skills before entering into the industry.
- 9. To inculcate practical knowledge in Computer Networking and Operating systems with the help of CISCO Certifications.

#### **Employability Skills Enhancement Training Programmes**

- 1. Soft Skills Training
- 2. Technical Training
- 3. Programming Skills Training C, Data Structures, Java & Python
- 4. Foreign Language Training
- 5. Verbal Training
- 6. Aptitude Training

#### **CRT Online Assessment Tests**

- a) I B.Tech Coding practice through Code Tantra, Weekly online Assessment tests
- b) II B.Tech Coding practice through Code Tantra & Reference Globe, Weekly online

Assessment tests

c) III B.Tech - Coding practice through Code Tantra & Reference Globe, Weekly online

Assessment tests, daily online Assessment tests during last one month

d) IV B.Tech - Coding practice through Code Tantra & Reference Globe, daily online

Assessment tests

### Value Added Certification Training Programmes Through Centres

- 1. CISCO C, CISCO Linux & CISCO Networking Certification through CISCO Networking Academyestablished in the year 2012.
- 2. Oracle Certification through Oracle as Oracle Academic Partner since the year 2012.
- 3. Robotics Certification Training Programme Modules I-V, through Robotics Centre of Excellence-established in the year 2017.
- 4. IBM Cognitive Certifications-Python, Data Science and AI/ML.
- 5. TCS ION Technical Certifications.
- 6. Coursera Certifications in C, Python, Data Structures, Algorithms, Cloud Computing, Artificial Intelligence, Machine Learning, Data Science, Blockchain Technologies, HTML,SQL, Cyber Security, IOT etc.

#### Value Added Professional English Certification Training Programmes

- 1. Oxford Achievers Certification through Oxford University Press, India since 2018 for communication skills development.
- 2. Pearson Certification through Pearson MePro.
- 3. Business English Certification (BEC) through Cambridge University, London, U.K.
- 4. TCS ION Soft Skills & Communication Skills Certifications.
- 5. Cambridge Language and Soft Skills Certifications.
- 6. Coursera certifications

#### **Project Based Training Programmes**

From I to IV year B.Tech on C,DATA STRUCTURES,POYTHON, JAVA, DBMS, OS,Web Designing, PCB Designing, Robotics, Solar Energy Systems and MAT LAB, INNOVATIVE PRODUCT DEVELOPMENT.

#### **Finishing School Concepts**

To meet the requirements of the industry and to be on par with Technological Advancements, Finishing Schools are organized for IV year on Latest Technologies like Robotics, Internet of Things, Block Chain, Embedded Systems, R Programming, Big Data Analysis, Network Security,

Cloud Computing, SIM Power Systems, Power Electronics, Power Semi-Conductor Drives, Entrepreneurial Skills Development Programmes, Idea Presentation, Hackathons for Start-ups', National/International Competitions participation, Guest Lectures, Workshops, Business Plan Competitions, Global Education and Career Counselling Centre, To guide students on higher education and job opportunities in India and Abroad.

The companies which generally visit our campus includes Accenture, Wipro, Cognizant, Flipkart, IBM, Virtusa, CISCO, Zensar, Capgemini, Dell Technology, Mind tree, Deloitte, DXC Technology, Epam, HCL Technology, Hitachi, L&T Technology Sciences, Lowes India, Mentor

Graphics, Publics Sapient, Tejas Networks, Tiger Analytics, Value Momentum, DBS, E2open, Prolifics, TCS (Digital), Dupont, Tech Mahindra, Acolite, Hexaware and PWC.

The hard work done by faculty and students resulted in the following achievements in the organization.

- 1. Many students secured jobs through campus placements.
- 2. Students got admissions for higher studies in top universities in the world.
- 3. Few of the students became entrepreneurs and turned out to be job providers.
- 4. Some of the students got lead positions in Multinational and National corporate companies

File Description	Document	
Appropriate webpage in the Institutional website	<u>View Document</u>	
Any other relevant information	View Document	

## 5. CONCLUSION

#### **Additional Information:**

The college continuously strives to achieve its objective of providing quality higher education at an affordable cost to students. Efforts have been invested in addressing classroom needs by constructing new buildings within our available space and expanding offices and teachers' staff rooms. To enhance the learning experience each class room is equipped with Digital Smart Boards with high speed internet connectivity. The entire accounting system has been computerized, contributing significantly to transparency and data preservation.

The Internal Quality Assurance Cell (IQAC) has been a dynamic force in championing and supporting quality initiatives across academics, research, extension activities, and collaborations with industry and academia. In alignment with the guidelines set forth in the National Education Policy (NEP) of 2020. This event serves as a platform for students to present innovative ideas, nurturing the implementation of Innovative Product Development (IPD). The IPD is seamlessly integrated into the UG curriculum starting from the second year. Furthermore, to instill a research-oriented mindset, academic project works are systematically published in UGC/SCOPUS journals

The institution has following accolades

- Accredited by NBA & NAAC with 'A' grade
- National Ranking by NIRF Innovation Rank band (151-300), MHRD, Govt. of India
- Ranked 12th under Top Engineering Colleges of Super Excellence in India by CSR Rankings-2023
- AAAA Rated by Careers 360 Magazine.
- AAAA+ Rated by Digital Learning Magazine
- Ranked in Top 10 Promising Colleges for Data Science in India 2023 by Higher Education Review
- 48th Rank in Top T-Schools in India by Data Quest Magazine.
- 144 Rank by India Today Best Engineering Colleges of India Rankings 2023
- 51st National Ranking and 5th Telangana State Ranking by Times of India, Times News Magazine
- Ranked as
  - o 117th in Best Colleges in India,
  - 8th in Emerging Private Engineering Colleges in India
  - 13th in Telangana, 53rd in South Zone & 89th in India under Private Engineering Colleges-2023 by THE WEEK Magazine Survey-2023
- Ranked in Top 10 Women colleges in India by Women Entrepreneur India Magazine
- Received Sixteen (16) University Academic Gold Medals from JNTU, Hyderabad for student academic excellence

# **Concluding Remarks:**

Malla Reddy Engineering College for Women (MRECW) is dedicated to cultivating a conducive academic environment, striving to produce world-class engineers. Committed to Outcome Based Education (OBE), our institution employs a flexible curriculum aligned with industry standards, incorporating clear COs, POs, and PSOs. MRECW's mission is to generate employable students at the national and international levels through effective academic and training programs.

Utilizing ICT tools for course delivery, we emphasize hands-on training in advanced courses and standard laboratory experiments. Faculty Appraisal ensures ongoing improvement, while the Research and Development (R&D) cell fosters a culture of research, supporting faculty in enhancing the quality of their publications. Innovative Product Development (IPD) is integrated into the curriculum, encouraging student participation in national and international hackathons.

The Training and Placement (T&P) cell plays a pivotal role in providing essential training and support for students to secure placements. This includes promoting participation in certification courses focused on the latest technologies and encouraging internships offered by AICTE and esteemed companies for real-time industry exposure.

MRECW consistently enhances its infrastructure through meticulous monitoring and maintenance, managed by committees led by the Principal, emphasizing academic excellence. Active participation in curricular and co-curricular activities is encouraged, with state-level and intra-college sports events promoting healthy competition and physical well-being. Regular Alumni Meets sustain meaningful connections with alumni, whose feedback holds significant importance.

The institution's effective governance mechanism aligns with its vision and mission, employing decentralization and participative management principles through e-governance. The Internal Quality Assurance Cell ensures OBE implementation through academic audits, undertaking initiatives aligned with the new NEP 2020 and NAAC Peer Team Reports.

MRECW contributes to society through medical camps and awareness programs in rural areas, adopting two villages through NSS Units 1 & 2, showcasing a commitment to holistic community development. This aligns with the institution's vision of contributing to the socio-economic development of the country.

Consistently striving for progress, MRECW meticulously plans and executes activities for the overall development of students, aiming to enhance their employability and contribute to societal advancement.

# **6.ANNEXURE**

## 1.Metrics Level Deviations

	Sub Questions and Answers before and after DVV Verification			
2.4.3	Average teaching experience of full time teachers (Data to be provided only for the latest completed academic year, in number of years)			
	2.4.3.1. <b>Total teaching experience of full-time teachers as of latest completed academic year</b> Answer before DVV Verification: 2705			
	Answer after DVV Verification: 900			
	Remark : DVV has made changes as per the report shared by HEI.			
3.2.3	Percentage of teachers recognised as research guides as in the latest completed academic year			
	3.2.3.1. Number of teachers recognised as research guides as in the latest completed academic year:			
	Answer before DVV Verification: 4 Answer after DVV Verification: 3			
	Remark : DVV has made changes as per the report shared by HEI.			
3.4.3	Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years			
	3.4.3.1. Number of research papers in the Journals notified on UGC CARE list year wise during the last five years			
	Answer before DVV Verification: 842 Answer after DVV Verification: 774			
	Remark : DVV has made changes as per the report shared by HEI.			
3.4.4	Number of books and chapters in edited volumes published per teacher during the last five years			
	3.4.4.1. Total Number of books and chapters in edited volumes published during the last five years			
	Answer before DVV Verification: 1129 Answer after DVV Verification: 793			
	Remark: DVV has made changes as per the report shared by HEI.			
3.6.2	Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years			
	3.6.2.1. Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years.			

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
30	15	17	10	12

Answer After DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
15	16	19	05	10

Remark: DVV has made changes as per the report shared by HEI.

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years

Answer before DVV Verification:

Answer After DVV Verification :28

Remark: DVV has made changes as per the report shared by HEI.

- 4.1.2 Percentage of expenditure excluding salary, for infrastructure development and augmentation year wise during the last five years
  - 4.1.2.1. Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
855.62	1170.97	266.08	282.18	154.95

Answer After DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
98.85	61.32	73.90	25.43	146.46

Remark: DVV has made changes as per the report shared by HEI.

- 4.2.2 Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals year wise during the last five years
  - 4.2.2.1. Expenditure for purchase of books / e-books and subscription to journals/e-journals year wise during last five years (INR in lakhs)

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
157.89	154.74	79.56	94.58	60.63

Answer After DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
2.64	6.01	7.00	1.88	8.38

Remark: DVV has made changes as per the report shared by HEI.

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

# 4.3.2.1. Number of computers available for students' usage during the latest completed academic year:

Answer before DVV Verification: 1977 Answer after DVV Verification: 1887

Remark: DVV has made changes as per the report shared by HEI.

# 6.3.3 Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the last five years

# 6.3.3.1. Total number of teachers who have undergone online/ face-to-face Faculty Development Programmes (FDP)/ Management Development Programs (MDP) during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
160	64	95	60	80

#### Answer After DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
155	60	86	58	77

Remark: DVV has made changes as per the report shared by HEI.

#### 6.5.3 Institution has adopted the following for Quality assurance:

- 1. Academic and Administrative Audit (AAA) and follow up action taken
- 2. Conferences, Seminars, Workshops on quality conducted
- 3. Collaborative quality initiatives with other institution(s)
- 4. Orientation programme on quality issues for teachers and students
- 5. Participation in NIRF and other recognized ranking like Shanghai Ranking, QS Ranking Times Ranking etc
- 6. Any other quality audit recognized by state, national or international agencies

Answer before DVV Verification: A. Any 5 or more of the above

Answer After DVV Verification: B. Any 4 of the above

Remark: DVV has made changes as per the report shared by HEI.

# **2.Extended Profile Deviations**

)	Extended Q	uestions									
2	Total numb	Total number of full time teachers worked/working in the institution (without repeat count)									
	during last	during last five years:									
	Answer before DVV Verification: 305										
	Answer afte	Answer after DVV Verification : 316									
1	Total expen	nditure excl	uding salary	y year wise	during the l	ast fi	ve yea	rs (	INR	in lakhs)	
	Answer before DVV Verification:										
	2022-23	2021-22	2020-21	2019-20	2018-19						
				- 4 - 0 - 20 -		ı					
	1635.2376	1651.2626	591.73480	545.97305	664.45842						
	ll.		591.73480	545.97305	664.45842						
	5	1651.2626 6 er DVV Ver		545.97305	664.45842	,					
	5	6		2019-20	2018-19						