Criterion VII – Institutional Values and Best Practices

Metric	Key Indicator - 7.1 Institutional Values and Social Responsibilities		
No.	Condon Fauity		
	Gender Equity		
7.1.1	Measures initiated by the Institution for the promotion of gender equity		
QıM	during the year		
	Describe gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words		
	Provide Web link to:		
	Annual gender sensitization action plan		
	• Specific facilities provided for women in terms of:		
	a. Safety and security		
	b. Counselling		
	c. Common Rooms		
	d. Day care center for young children		
	e. Any other relevant information		

Gender equality is one of the key challenges facing society today. The institute conducts regular gender equity promotion programs. Guest speakers from prominent field are invited to speak on the given topic which highlights the importance and contribution of women in the society.

The gender equity promotion programs organized by the institution are given below:

MRCET has a strong ethical work culture that is based on inclusivity. It observes highest ethical standards in all its activities. Equal opportunities are provided to all individuals irrespective of gender, race, caste, color, creed, language, religion, political or other opinion, national or social origin, property, birth or other status. Its unique work culture, healthy traditions and ethos have led to enrolment of 68% women students and 49% women staff. Safety, security and well-being, along with gender equity and friendly working atmosphere are the issues of prime concern to MRCET.

Annual gender sensitization action plan taken in MRCET is as follows:

Name of the Programme	Date	No. of Participants
Women Empowerment	10 August, 2019	350
Gender Sensitization-ECE	9 September, 2019	240
Gender Sensitization-CSE	10 September, 2019	240
Gender Sensitization-IT	11 September, 2019	180
Gender Sensitization-MECH	12 September. 2019	180
Gender Sensitization-ANE, EEE	13 September, 2019	120
Workshop on "Female Foeticide & Gender Justice"	7 October, 2019	240
International Womens Day Celebrations	7 March, 2020	115

Gender sensitivity is an inherent value in the cultural ethos of the institute and its neighboring community, as is evident by the following facilities –

(a) Safety and Security

- Well-trained and vigilant women security guards stationed across the campus.
- Security checkpoints at all campus entries and exits.
- Extensive surveillance network with 24x7 monitored control rooms.
- Rotational duty by all faculty members for discipline and security.
- The Proctorial Committee includes male and female proctors at institute as well as faculty level.
- Night Patrols by local community including students and teachers.
- Summer Patrols by students.
- Strict implementation of Anti-Ragging, Anti-Smoking and Mobile Free Campus.
- Awareness campaigns on women safety and gender sensitivity through street plays, rallies and camps by NSS and NCC student volunteers.
- Separate hostels for men and women with dedicated wardens.
- The Institute is the preferred destination of parents for education of their female wards as evidenced by the Stakeholder Feedback.
- Eco-friendly crèche for wards of institute staff with dedicated staff and faculty supervisors.

(b) Counseling

- Formal and informal avenues for counseling male and female students and staff for academic and other issues/problems.
- Class and Proctorial Committees are available for counseling of both males and females'
 - students.
- Grievance Redressal Committees for staff and students
- Gender sensitization camps in slums and rural areas of Agra district that include the following aspects:
- Women's rights
- Human rights
- Child rights
- Gender justice
- Gender equality
- Gender sensitization workshops
- Specific courses dedicated to gender issues.
- Campaigns against female feticide.
- Business Advisory Clinic provides free counseling to various MSMEs.
- Faculty Placement Cells and Alumni Placement Assistance Cell
- Others Entrance Exam Counseling, Matrimonial Counseling, Orientation Programmes for Teachers and Students.
- Medical Counseling, Moral Counseling, Career Counseling, Village Counseling, Vocation Counseling weekly through medical camps.

(c) Common Rooms:

• In most of the Departments, common rooms have been allocated for men and women, which also facilitate meetings and discussions.

(d) Other Measures

Other measures of Gender Sensitization include –

- Curriculum and Coursework.
- Co-curricular activities.
- Enrolment of 68% women students and 49% women staff

MRCET has been successful in caring for its diverse students and staff population harmoniously in its efforts to steadily achieve its vision and mission. This is also evident from regular feedback from all its stakeholders.

Other Initiatives

Additional initiatives ensure active participation of students in co-curricular activities including sports as it is a compulsory core course in all UG programmes and also at intrafaculty, inter-faculty and inter-university levels.

Community outreach

The Life-Long Learning Education (LLLE) programme provides opportunity to women from all walks of life to get trained in entrepreneurship and self–employable skills.

As part of NSS activities, free educational camps are organized fortnightly in neighboring villages, which help transform rural women in building awareness about health, hygiene, importance of child education and provide a launching pad to induct them into vocational skilling.

MRCET has been successful in caring for its diverse students and staff population harmoniously in its efforts to steadily achieve its vision and mission. This is also evident from regular feedback from all its stakeholders.

Environmental Consciousness and Sustainability
The Institution has facilities for alternate sources of energy and energy
conservation measures
 Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment Options: A. Any 4 or All of the above
B. Any 3 of the above
C. Any 2 of the above D. Any 1of the above
E. None of the above

Options **B: Any 3 of the above**

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)

 Q_lM

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

MRCET key operations has very less impact on the environment as the University is very conscious of generating less waste and recycling it by passing it through a system that enables the used material to be reused ensuring that less natural resources are consumed.

The college has segregated waste into three parts:

- 1.Solid Waste
- 2.Liquid Waste
- 3. Hazardous Lab Waste

Solid Waste:

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.

The College has contacted an authorized vendor who collects the waste from the designated place, segregate them, recycles them and disposes them at the landfills authorized by the government.

Liquid Waste:

Liquid waste generated by the College are of two types:

- 1.Sewage waste
- 2.Laboratory, Laundry and cafeteria effluent waste

The above waste is treated through Sewage Treatment Plants (STPs) and Effluent Treatment Plants (ETPs) and the water is used for horticulture and flushing in toilets.

Number of ETP: 9 with handling Capacity: 68,200 liters/day

Number of STP: 4 with handling Capacity: 10,13,000 liters/day

The Hazardous Lab & other Waste Disposal, a Standard Operating Procedure has been evolved for handling the hazardous waste disposal system. For disposal of hazardous waste, government approved agency collects these from the designated point earmarked as "Hazardous Waste Room." Records are maintained both at the College level and Department Level for the compliance of the process.

E-Waste Management:

Flip flops, memory chips, motherboard, compact discs, cartridges etc generated by electronic equipments such as Computers, Radio,TV, Phones, Printers, Fax and Photocopy machines are recycled properly. Instead of buying a new machine buyback option is taken for technology

upgradation. The e-waste generated from hardware which cannot be reused or recycled is being disposed off centrally through government authorized vendors.

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
Options:
A. Any 4 or all of the above
B. Any 3 of the above
C. Any 2 of the above
D. Any 1of the above

Options A: Any 4 or all of the above

E. None of the above

7.1.5	Green campus initiatives include
	7.1.5.1. The institutional initiatives for greening the campus are as follows:
$\mathbf{Q}_{\mathbf{n}}\mathbf{M}$	1. Restricted entry of automobiles
	2. Use of Bicycles/ Battery powered vehicles
	3. Pedestrian Friendly pathways
	4. Ban on use of Plastic
	5. landscaping with trees and plants
	Options:
	A. Any 4 or All of the above
	B. Any 3 of the above
	C. Any 2 of the above
	D. Any 1of the above
	E. None of the above
	C. Any 2 of the above D. Any 1 of the above

Options A: Any 4 or All of the above

7.1.6	Quality audits on environment and energy are regularly undertaken by the
	institution
QnM	7.1.6.1. The institutional environment and energy initiatives are confirmed
	through the following
	1. Green audit
	2. Energy audit
	3. Environment audit
	4. Clean and green campus recognitions/awards
	5. Beyond the campus environmental promotional activities.
	Options:
	A: Any 4 or All of the above
	B: Any 3 of the above
	C: Any 2 of the above:
	D: Any 1 of the above:
	E: None of the above
	0.4

Options A: Any 4

7.1.7	The Institution has disabled-friendly, barrier free environment
	1. Built environment with ramps/lifts for easy access to classrooms.
QnM	2. Disabled-friendly washrooms
	3. Signage including tactile path, lights, display boards and signposts
	4. Assistive technology and facilities for persons with disabilities (Divyangjan)
	accessible website, screen-reading software, mechanized equipment
	5. Provision for enquiry and information: Human assistance, reader, scribe, soft
	copies of reading material, screen reading
	Options:
	A. Any 4 or all of the above
	B. Any 3 of the above
	C. Any 2 of the above
	D. Any 1of the above
	E. None of the above

Options: B. Any 3 of the above

	Inclusion and Situatedness
7.1.8	Describe the Institutional efforts/initiatives in providing an inclusive
	environment i.e., tolerance and harmony towards cultural, regional,
Q1M	linguistic, communal socio economic and other diversities (within 500 words).

Institution provides an inclusive environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. Different sports and cultural activities organized inside the college promote harmony towards each other.

Commemorative days like (1) Women's day (2) Yoga day, Cancer day, AIIDS along with many regional festivals like Bathukamma and Dasara are celebrated in the college. This establishes positive interaction among people of different racial and cultural backgrounds. There are different grievance redressal cells in the institute like Student grievance redressal cell, Women grievance redressal cell which deal with grievances without considering anyone's racial or cultural background.

Institute has code of ethics for students and a separate code of ethics for teachers and other employees which has to be followed by each one of them irrespective of their cultural, regional, linguistic, communal socioeconomic and other diversities.

For the patients also, the institute reaches out to community for providing better oral health care. Satellite centers have been established to provide patient care in rural areas. Jail camps are organized to provide dental treatment to jail inmates. Buses ply regularly from the college to get patients to the institute for the convenience of patients. School camps are also organized for oral screening of the kids so that preventive and interceptive dental treatment can be provided. Tobacco cessation cell has been established for the purpose of spreading awareness and providing necessary treatment and referrals wherever necessary to the needy. All these facilities to the patients are provided irrespective of their caste, creed, color, sex or socioeconomic background.

Human Values and Professional Ethics	

7.1.9	Sensitization of students and employees of the Institution to the constitutional	
	obligations: values, rights, duties and responsibilities of citizens	
Q1M	Describe the various activities in the Institution for inculcating values for being	
	responsible citizens as reflected in the Constitution of India within 500 words.	

MRCET takes pride in the fact that apart from preparing a sound academic foundation of the student community; the college constantly works upon to develop them as better citizens of the country. In this regard, the institute, apart from imparting professional legal education, inculcates a feeling of oneness among the student community through various practices and programs. Various faculties have always been in the practice of organizing activities that not only initiate but also motivate the students to adopt various practices that promote the "Unity in Diversity" of our motherland.

The College ensures that the students participate very enthusiastically in all such activities. Since the last five years, the college has strived forward with great effort to increase the level of awareness and appropriate practices amongst the students with regard to the following areas:

1. National Identities and Symbols:

The College has always taken various direct and indirect 116 steps which promote the awareness about various National Identities and Symbols. The Indian Tri-colour stands tall at the main entrance of the College and in this way the College spreads the message of nation first policy. The College celebrates the Independence Day & Republic Day with great pomp and vigour. Department of MBA organizes and celebrates the Constitution Day on an annual basis and thus contributes to the spreading of Constitutional values and ideals.

2. 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:

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

MRCET 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.

List of various activities conducted in the Institute for inculcating values for being responsible citizens as reflected in the Constitution of India are given below:

S.No	Title of the programme/Activity	Duration (frm-to)	Number of participants
1	Independence Day -2019	15.08.2019	158
2	General assembly - Theme – Human Rights-MBA	02.11.2019	238
3	Guest lecture on Duties and Responsibilities of Citizens	04.12.2019	168
4	National Voters day	25.01.2020	420
5	Republic Day-2020	26.01.2020	83
6	Voters Awareness	20.02.2020	245
7	Special lecture on 'Conservation of natural resources'	23.02.2020	200
8	Special talk on Consumer Rights	05.03.2020	180
9	Awareness on Higher Education and voting rights	07.04.2020	558
10	Yoga Day	21.06.2020	61

	Human Values and Professional Ethics
7.1.10	The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this
QnM	regard.
	1. The Code of Conduct is displayed on the website
	2. There is a committee to monitor adherence to the Code of Conduct
	3.Institution organizes professional ethics programmes for students, teachers,
	administrators and other staff
	4. Annual awareness programmes on Code of Conduct are organized
	Options:
	A. All of the above
	B. Any 3 of the above
	C. Any 2 of the above
	D. Any 1of the above
	E. None of the above

Options: A: All of the above

Human Values and Professional Ethics

7.1.11	Institution celebrates / organizes national and international commemorative
	days, events and festivals
Q1M	Describe the efforts of the Institution in celebrating /organizing national and
	international commemorative days, events and festivals during the last five years
	within 500 words

The following is the list of national and international commemorative days, events and festivals the institute celebrates every year and make the students and faculty to participate.

S.No	Name of the event	Date	No. of the Participants
1	International Youth Day	12 August, 2019	850
2	Independence Day	15 August, 2019	258
3	National Sports Day	29 August, 2019	765
4	Teachers Day	05 September, 2019	2550
5	Engineers Day	15 September, 2019,	2650
6	Gandhi Jayanthi	02 October, 2019	512
7	Human Rights Day	10 December, 2019	459
8	National Energy Conservation Day	14 December, 2019	187
9	Republic Day	26 January, 2020	225
10	International Womens Day	8 March, 2020	115
11	World Earth Day	22 April, 2020	675
12	National Technology Day	11 May, 2020	775
13	Telangana Formation Day	02 June, 2020	254
14	World Environment Day	05 June, 2020	465
15	International Yoga Day	21 June, 2020	42

International Youth Day:12 August, 2019

International Youth Day (IYD) gives an opportunity to celebrate and mainstream young peoples' voices, actions and initiatives, as well as their meaningful, universal and equitable engagement.

Department of MBA takes the initiation and organizes various activities like, debate, elocution, essay writing and other programmes where the students from various departments actively participate.

Independence Day-15 August, 2019

Independence Day marks the end of British rule in 1947 and the establishment of a free and independent Indian nation. It also marks the anniversary of the partition of the subcontinent into two countries, India and Pakistan, which occurred at midnight on August 14–15, 1947.

MRCET celebrates the Independence Day every year. Principal will hoist the flag and delvers speech highlighting about the significance of republic day to the students and staff. Few Directors, Heads and AO also speaks along with Principal.

National Sports Day: 29 August, 2019

The **National Sports Day** is observed every year to spread awareness about the importance of **sports** and games in the life of every individual. The **Day** remembers the **national sports** personality Dhyan Chand who was one of the greatest field hockey players of all time. MRCET Sports Department, organizes National Sports Day every year and organizes Intra Department Sports in various sports.

Teachers Day: 05 September, 2019

Teacher's Day is celebrated to acknowledge the challenges, hardships, and the special role that **teachers** play in our lives. **Teachers Day** is one such event for which students and **teachers** equally look forward to.

Students of all departments organizes Teachers day and facilitate faculty members and conduct few events.

Engineers Day: 15 September, 2019

Engineer's Day is celebrated to feel proud of the **engineers** of our country and to celebrate their achievements in each and every field of science and technology. In the economic progress and development of a country **engineers** play a very crucial role and contribution.

All departments of MRCET organizes various events to students and distribute prizes for the best three performances.

Gandhi Javanthi: 02 October, 2019

Honours Mahatma **Gandhi's** role in Indian Independence. Community, historical celebrations. **Gandhi Jayanti** is an event celebrated in India to mark the birthday of Mahatma **Gandhi**. It is celebrated annually on 2 October.

MRCET celebrates Gandhi Jayanthi every year and remembers the significant role played by Gandhiji.

Human Rights Day: 10 December, 2019

International **Human Rights Day** is observed on December 10 annually. The main **aim** behind celebrating this **day** is to improve the physical, social, cultural and spiritual well-being and welfare of the vulnerable group of people globally.

MRCET celebrates Human Rights Day and highlights the importance of Human Rights to students. Eminent Speakers are invited to deliver lectures on Human Rights.

National Energy Conservation Day-14 December, 2020

The **National Energy Conservation Day** is organized every year on 14th December every year by Bureau of **Energy** Efficiency (BEE), under Ministry of Power, with an **aim** to showcase India's achievements in **energy** efficiency and **conservation**, while working for its ambition of holistic development as part of the nation's

Department of EEE organizes various programs on this occasion like paper presentation, poster presentation and arranging Guest lectures by eminent personalities in that particular domain.

Republic Day: 26 January, 2020

Republic Day the date on which the Constitution of India came into effect on 26 January 1950 replacing the Government of India Act (1935) as the governing document of India and thus, turning the nation into a newly formed **republic**.

MRCET celebrates the Republic Day every year. Principal will host the flag and delvers speech highlighting about the significance of republic day to the students and staff. Few Directors, Heads and AO also speaks along with Principal.

International Womens Day: 8 March, 2020

International Women's Day is a time to reflect on progress made, to call for change and to celebrate acts of courage and determination by ordinary **women**, who have played an

extraordinary role in the history of their countries and communities.

MRCET celebrated International Womens Day on 7 March, 2020 since 8 March 2020 being Sunday. Dr D Sujatha, Head, Department of CSE has taken the lead in organizing the function in which all lady faculty members along with Principal, Directors, Heads have participated.

World Earth Day: 22 April, 2020

Earth Day is an annual event celebrated around the **world** on April 22 to demonstrate support for environmental protection.

Students of all department are made to exhibit posters through online highlighting the importance of environment and the prizes are distributed to the first three best posters

National Technology Day: 11 May, 2020

Main **objective** behind the observance of **National Technology Day** is to promote the spirit of entrepreneurship and innovation among Indians. On this **day**, the Government of India acknowledges upcoming entrepreneurs and innovators for their exceptional achievements.

Director, R&D initiates few programs and highlights the innovations, R&D Projects and other activities to Principal, all Directors, Heads and faculty members.

Telangana Formation Day: 02 June, 2020

The college celebrates the Telangana Formation Day and organizes few programs in this regard.

World Environment Day: 05 June 2020

The day raises **awareness** about the environmental issues like global warming, marine pollution, human over-population, protection of wildlife, and sustainable consumption. It has spread so far and wide, that WED has become a global platform for countries to reach out to the public.

Students of all department are made to exhibit posters through online highlighting the importance of environment and the prizes are distributed to the first three best posters.

International Yoga Day-21 June 2020

Spreading growth, development and peace throughout the **world**. - Making people aware of physical and mental illnesses and providing solutions through **yoga**. - It also **aims** to develop a habit of meditation for peace of mind, self-awareness which is necessary to survive in a stress-free environment.

MRCET encourages yoga activities and Sports Department organizes a small workshop on Yoga and its significance to students and Faculty Members.

Metric	Key Indicator - 7.2 Best Practices	
No.		
7.2.1	Describe two best practices successfully implemented by the Institution as	
	per NAAC format provided in the Manual.	
$\mathbf{Q_l}\mathbf{M}$	Provide web link to:	
	Best practices in the Institutional web site	

Note:

Format for Presentation of Best Practices

1. Title of the Practice

This title should capture the keywords that describe the practice.

2. Objectives of the Practice

What are the objectives / intended outcomes of this "best practice" and what are the underlying principles or concepts of this practice (in about 100 words)?

3. The Context

What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?

4. The Practice

Describe the practice and its uniqueness in the context of India higher education.

What were the constraints / limitations, if any, faced (in about 400 words)?

5. Evidence of Success

Provide evidence of success such as performance against targets and benchmarks, review/results. What do these results indicate? Describe in about 200 words.

6. Problems Encountered and Resources Required

Please identify the problems encountered and resources required to implement the practice (in about 150 words).

7. Notes (Optional)

Please add any other information that may be relevant for adopting/ implementing the Best Practice in other Institutions (in about 150 words). Any other information regarding Institutional Values and Best Practices which the university would like to include.

BEST PRACTICE - 1

- 1. Title of the Practice: Online Skill Development Programmes
- **2. Objectives of the Practice:** The main objective of online **skill development** programmes are to set up a workforce that is proficient with the necessary **skills** and knowledge.
- **3.** Context: Skilled employees yield higher productivity and have the ability to work effectively and efficiently. In this context, the institute has taken initiatives to provide skill development programmes and has provided the required platform like Reference Globe, CoCubes, Times and Coursera Certification.
- **4. Practice:** All the students and faculty are provided the necessary logins for practice and conducting online exams in all related online platforms. Practice Tests and Talent Tests are conducted periodically for better assessment of the students. Using Coursera students can acquire Course Completion Certificates from World Top Universities.

5. Evidence of Success:

- (i) Using CoCubes, Reference Globe and Time Online assessment tools, students could perform well in placement and grabbed the opportunities. Almost 600+ placements have been achieved.
- (ii) Using Coursera Platform, almost 20000+ certifications have been completed by the students.

6.Problems encountered and resources required

- (i) Training of faculty
- (ii) To develop framework for conducting online skill development programmes
- **7. Outcome:** Successful completion of certification programmes from world famous universities and grabbing placement opportunities in top MNC companies.

BEST PRACTICE – 2

1. Title of the Practice: EK BHARAT SHRESTHA BHARAT(EBSB)

- **2. Objectives of the Practice:** The main objective would be to learn the language, culture, living styles, festivals, social customs, food habits and such other aspects of the social and cultural affairs of the paired State
- **3. Context:** All the 36 States/ UTs in India have been paired for an entire year and mandated to sign MoUs with each other, delineating aset ofactivities that they would carry out together though the year. Such interaction between different segments of the population of each pair of States/ UTs at the cultural level, would generate the vibrancy of understanding & appreciation amongst the people and forge mutual bonding, thus securing an enriched value system of unity in the nation.
- **4.Practice:** The organization of the student exchange would be done in the following manner. Day -1: Interaction of visiting students contingent with counterpart contingent in EBSB Club

and familiarity building.

Day-2: Language sharing, elocution in paired State's languages, sharing of information on respective states etc.

Day-3: Visit to nearby village(s) by visiting contingent accompanied by local students/teachers.

Day—4: Visit to local tourist spots, market places, interaction with local people.

Day–5: Food festival, experience exchange and cultural programme. 5.EvidenceofSuccess: Manav Rachana International Institute of Research and Studies, Haryana has been paired with our Institute and a total of 50 students and two faculty members were allotted. In turn, 50 students and two faculty members are identified from our Institute to visit the mentioned institute under student-faculty exchange program.

6.Problems encountered and resources required

(i) Entire arrangements are been made and due to present pandemic situation the program is temporarily postponed.

7.Outcome: Successful completion of exchange program is achieved.

Metric No.	Key Indicator - 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
QıM	Provide web link to: • Appropriate web in the Institutional website

Faculty and Student Involvement in Innovation and Research

MRCET being a research and innovation driven institute, encourages students towards research and innovation practices. Apart from Doctorate & PG, UG students are also encouraged and given opportunity to get involved in research efforts. Non-teaching credit courses like B.Tech Major Projects and M.Tech Dissertation are made research driven and a number of scientific papers and patents have come out of this work as an outcome. Beside this, there is a credit course by name Research Methodology (2 credit Course) which is intended for Advanced Learners and for those students who have interest in research and innovation. Research Methodology course is a research driven course open to both UG and PG students. In this course, students are given a research problem on which they work for one to two semesters with the possibility of a publication, patent, design or technology. The student is required to present the body of work in an objective report and demonstration thereby enabling their critical thinking abilities in problem solving.

Research Methodology

During the course, the student will learn how to:

- Develop a research proposal
- ❖ Carry out a literature search and write a critical state-of-art review
- ❖ Select suitable research methods and integrate them within a research methodology
- Carry out the research processes
- ❖ Analyze results critically
- ❖ Write-up the body of work as a technical report

Outcomes:

These courses provide an opportunity to pursue research in a topic within the broad area of the student's interest.

- Undertaking the course will enable the student to:
- ❖ Investigate in depth a problem of scientific relevance
- Survey recent research in a chosen topic
- ❖ Acquaint with research methods applicable to the topic
- Organize and carry out an independent study
- ❖ Develop writing and presentation skills for scientific communication

In the last few semesters that we had introduced this course to our UG and PG student, the outcomes of these courses were significant and a good number of indexed research papers, patents and new technologies evolved from this course.

It was also found that student who took this course had published good scientific papers which helped them to get R&D jobs, MS and PhD admission with scholarship in prestigious universities.

Also, in recent past, students worked on research problems floated with some of the foreign collaborators, have achieved significant success resulting in joint-authored scientific papers with authors from USA, U.K., Canada, China, Spain, Taiwan, Australia, Russia, Germany, Czech Republic, etc. UG and PG students have published more than 850 SCOPUS indexed publications and filed 70 patents in last 5 years from these efforts.

MRCET ACCOMPLISHMENTS

- ❖ Autonomous Institution, UGC, Govt. of India.
- ❖ Accredited by NBA, AICTE, New Delhi.
- ❖ Accredited by NAAC with 'A' Grade, UGC, Govt. of India.
- ❖ ISO 9001:2015 Certified Institution.
- ❖ 2(f) & 12(B) Recognition, UGC, Govt. of India.
- NSS Unit recognized by JNTUH, Hyderabad.
- * Research Centre Status, JNTUH, Hyderabad
- ❖ AICTE-MHRD Institution Innovation Council, Ministry of HRD, Govt. of India.
- ❖ Industry Institute Partnership Cell (IIPC)-EDC.
- Recognition of Scientific Industrial Research Organizations (SIROs) by Govt. of India.
- ❖ MRCET is a life member of NHRD Network
- ❖ CISCO International Certification Authorized Centre.
- ❖ Approved to admit Foreign Students/PIO's
- ❖ Nodal Center: IIT Bombay/Kharagpur for Technology Transfer
- Springer : International Conferences
- ❖ NASSCOM Nodal Center for NAC-Test Assessment
- ❖ Business Incubation Centre MSME, Govt. of India
- ❖ Global Education and Career Counseling Centre

TECHNOLOGY INITIATIVES

- ❖ The College has taken initiative for conducting CCNA certification programs in collaboration with M/s. CISCO Systems Inc.,
- ❖ The College focuses on Value added programs for initiating Certification Courses in MICROSOFT, DBMS, JAVA, PRO-E, EMBEDDED 'C', CATIA, RTOS and Airline/Airport Management and Business Management.
- ❖ The College has taken initiative for conducting training programme on Business English Certification Course for Engineering/MBA students leading to Business English Certificate, Cambridge University, London.
- Employment Enhancement Training Programme for Final Year students of Engineering/MBA
- Programme on "Promoting Human Excellence" for Engineering / MBA students in association with Vivekananda Institute of Human Excellence, Rama Krishna Math Hyderabad.
- ❖ Motivational/Inspirational Lectures from Reputed Industry and Organizations.
- Video Lectures from IIT's and reputed International Universities for advanced courses to explore latest technologies

PROFESSIONAL SKILL DEVELOPMENT INITIATIVES

- **❖** AMCAT Training partners
- CoCubes Training partners
- * Robotics Training and its applications.
- ❖ Soft Skills and Technological Skills Training for Employability.
- Value Added Certification Training Programmes:
- CISCO Certification
- ❖ Microsoft Technology Training & Certification
- JAVA Certification
- Business English Certification (BEC)
- ❖ Oxford Achiever's Certification.
- ❖ Oracle Academic Partner for JAVA Certification
- ❖ Business English Certification (BEC) Centre, University of Cambridge, U.K.
- ❖ Oxford Achiever's Certification, Oxford University Press, India.

TECHNOLOGY TRAINING AND CERTIFICATION

- **❖** Machine Learning Training and Certification
- ❖ Python Training and Certification
- ServiceNow Training and Certification

- **❖** PEGA Training and Certification
- Oxford Achiever's Training and Certification
- ❖ Career guidance and counseling for higher education in India and abroad.
- ❖ JAVA Training and Certification Microsoft Development Application
- Cloud Computing Technology Training and Certification
- ❖ Big Data Analytics Training and Certification
- CISCO Networking Training and Certification
- CATIA/CAD Training and Certification
- Certification course on 3D Printing

Future Plans of action for next academic year (500 words)

Malla Reddy College of Engineering & Technology (MRCET) is a constituent College of Malla Reddy Group of Institutions (MRGI) established in 2004.

The College offers Engineering courses (B.Tech.) in ECE, CSE, AE, MECH and IT disciplines and Post Graduate (M.Tech.) courses in ECE, CSE, MECH and AE specializations in addition to MBA programmes. The College campus with its arboriculture and horticulture is situated away from the hustle and bustle of the city provides a serene and tranquil atmosphere, which is conducive to both teaching and learning processes.

Approvals:

- ❖ Autonomous Institution, UGC, Govt.of INDIA.
- ❖ Approved by AICTE, Govt. of India, New Delhi.
- Permanently Affiliated to JNTUH, Hyderabad.
- Accredited by NBA, New Delhi, India.
- ❖ Accredited by NAAC with A-GRADE, UGC, New Delhi.
- ❖ ISO 9001:2015 Certified Institution.
- Approved by Govt. of Telangana, India.
- ❖ UGC 2f & 12(B) recognized institution, UGC New Delhi

Special Achievements:

- ❖ Autonomous Institution, UGC, Govt.of INDIA.
- ❖ Accredited by NBA, AICTE, New Delhi.
- ❖ Accredited by NAAC-A Grade, UGC, Govt. of India.
- ❖ ISO 9001:2015 Certified Institution.
- ❖ 2(f) & 12(B) Recognition, UGC, Govt. of India.
- ❖ NSS Unit recognized by JNTUH, Hyderabad.
- * Research Centre Status, JNTUH, Hyderabad
- ❖ MoU with NRDC. Govt. of India.

- ❖ AICTE-MHRD Institution Innovation Council, Ministry of HRD, Govt. of India.
- ❖ Industry Institute Partnership Cell (IIPC).
- * Recognition of Scientific Industrial Research Organizations (SIROs) by Govt. of India.
- ❖ MRCET is a life member of NHRD Network.
- CISCO International Certification Authorized Centre.
- ❖ Approved to admit Foreign Students/PIO's
- Nodal Center: IIT Bombay/Kharagpur for Technology Transfer
- ❖ NASSCOM Nodal Center for NAC Test Assessment
- ❖ Business Incubation Centre MSME, Govt. of India
- Global Education and Career Counseling Centre.

FUTURE PLANS OF THIS INSTITUTE

- To Start PhD Programmes: Considering the demand and the growth of technical education in this region, this institute has planned to start PhD Programmes in all eligible departments by seeking permission from affiliated university, JNTUH, Hyderabad.
- * To start new UG programmes in upcoming technologies: Considering the demand and growth of technical education in present scenario, the institute is planning to start new programmes in UG by name: CSE in AI and Machine Learning, CSE in Data Science, CSE in IoT, CSE in Cyber Security
- * To Establish Technology Business Incubation Centre: At present, industrial growth is satisfactory in Hyderabad region and in future it will be accelerated. Therefore, there is considerable scope for innovations and consultancy from the nearby industries. Therefore, it is planned to establish TBI Centre with all latest and hi-tech equipment to fulfil the requirement of nearby industries in respect of testing, calibration, consultancy, research, etc.
- ❖ To be UGC-CPE institute: The institute is UGC Autonomous with NAAC and NBA Tier-I accreditation. Based on the accomplishments and achievements of the institute, it is planning to apply for UGC-CPE Scheme

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- To obtain better NIRF and ATAL Rankings: The institute already obtained ATAL rankings and is placed in 6-25 Band. It will try to obtain better position in both NIRF and ATAL rankings.
- Construction of Auditorium for 1000 Students Capacity: At present, this institute has only one auditorium of capacity around 500 audiences. Considering the present/future intake of this institute, it is essential to build a big auditorium. Therefore, this institute has planned to construct the big auditorium of capacity around 1000 students.
- New Canteen Building: At present canteen area is small though a large open space is available for use adjoining to canteen. To enrich canteen facility to students for 24 hours, it is planned to construct new canteen building in the open space available in future.

UGC Autonomous Institution

Name Dr S Srinivasa Rao

Signature of the Director, IOAC

Name **Dr VSK Reddy**

Signature of the Chairperson, IQAC

PRINCIPAL

Malla Reddy College of Engg. & Tech UGC AUTONOMOUS INSTITUTION Maisammaguda, Doolapally, Secunderabad-500 100.