MUFFAKHAM JAH

College of Engineering and Technology



ANNUAL REPORT

2021



VISION

To be a part of universal human quest for development and progress by contributing high caliber, ethical and socially responsible engineers who meet the global challenge of building modern society in harmony with nature

MISSION

- To attain excellence in imparting technical education from the undergraduate through doctoral levels by adopting coherent and judiciously coordinated curricular and cocurricular programs
- To foster partnership with industry and Governmental agencies through collaborative research and consultancy
- To nurture and strengthen auxiliary soft skills for overall development and improved employability in a multi-cultural work space
- To develop scientific temper and spirit of enquiry in order to harness the latent innovative talents
- To develop constructive attitude in the students towards the task of nation building and empower them to become future leaders
- To nourish the entrepreneurial instincts of the students and hone their business acumen
- To involve the students and faculty in solving local community problems through economical and sustainable solutions

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ADMINISTRATION

Institution

Advisor Cum Director
Dean, Academics
Dean, Student Affairs
Registrar
College Librarian
Placement and Training Officer

Dr. Basheer Ahmed Prof. Ashfaque Jafari Prof. Syed Ferhathullah Hussainy Mr. K. V. Narsimha Rao Dr. Y. Ch. Venkateshwarlu Mrs. K. M. Rajini

Department

Civil Engineering
Computer Science & Engineering
Electrical Engineering
Electronics & Communication Engineering
Information Technology
Mechanical Engineering
Basic Sciences and Humanities

Prof. Md. Hamraj
Prof. A. A. Moiz Qyser
Prof. Mohammed Haseeb Khan
Prof. Md. Arifuddin Sohel
Prof. Mousmi A. Chourasia
Prof. Syed Ferhathullah Hussainy
Prof. Abdul Majeed

Section

Physics
Chemistry
English
Chief Co-ordinator & M.E. CAD/CAM
M. Tech. CSE
M.E. Digital Systems
M.E. Power Electronic Systems
M.E. Structural Engineering

Mathematics

Dr. Md. Abdul Rawoof Sayeed
Dr. Shaik Kareem Ahmed
Dr. V. Shanti
Dr. Shabana Tahniath
Prof. Shaik Khader Vali
Prof. Uma N Dulhare
Prof. Nazia Parveen
Mr. J. V. R. Vithal
Prof. Md. Abdullah Sharieff



NEW UG COURSE MEW UG COURSE

Artificial Intelligence and Machine Learning

INTAKE

60

DEPARTMENT

Computer Science and Engineering

In lieu of in neu or

Electronics and Instrumentation Engineering (60)**Electrical Engineering Department**

UG Courses in Emerging Areas

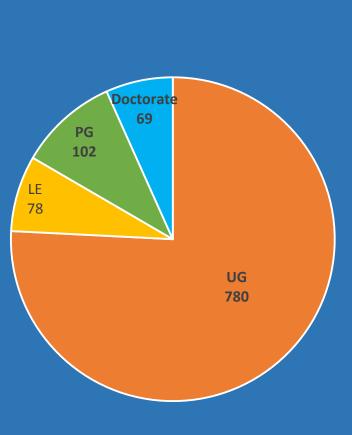
MJCET is now offering B.E. courses in the following emerging areas:

- AI & DS from 2020
- AI & ML from 2021

Closure of Courses

The following B.E. courses have been closed due to poor quality of student intake

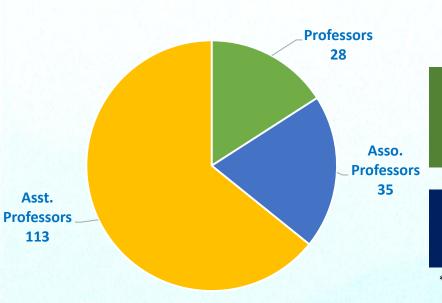
- **Production Engineering**
- Electronics and Instrumentation Engineering



Civil Engineering BE 120 **Civil Engineering** ME **Structural Engineering** 18 **Computer Science and Engineering** BE **CSE** 120 BE AI & DS 60 BE AI & ML 60 M. Tech. **CSE** 24 **Electrical Engineering** BE EEE 60 ME **Power Electronics System** 18 **Electronics & Communication Engineering** BE **ECE** 120 ME **Digital Systems** 24 **Information Technology** BE **Information Technology** 120 **Mechanical Engineering Mechanical Engineering** BE 120 18

ME

CAD/CAM



FACULTY

TOTAL FACULTY

176

@

1:20 faculty Student Ratio

Ph. D. 60* 33.9%

Pursuing Ph. D. 79 44.60%

* Including college librarian

Details

Dept.	Total Faculty	Professors	Associate Professors	Assistant Professors
CED	27	6	4	17
CSED	28	5	6	17
EED	25	3	7	15
ECED	24	4	3	17
ITD	19	2	3	14
MED	32	7	4	21
BS & H	21	1	8	12
Total	176	28	35	113

Participations

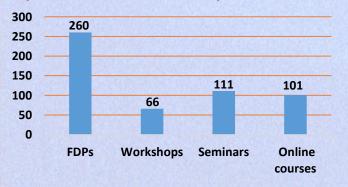
Faculty who attended

FDPs/ STTPs	61
Workshops	33
Seminars	53
Online courses	28

NPTEL / Coursera

23

Spread of Professional Development Activities



Publications

Papers published in

Control of the Contro	The second secon
National Journals	7
International Journals	57
National Conferences	6
International Conferences	29
Total	99

Other Publications

Books	13
Chapters in Books	11

NPTEL Certification Type – Prominent Achievers

Faculty name	Department	Certificate type
Prof. Kaleem Fatima	ECED	Elite + Gold
Dr. Aneesa Ferdose	Chemistry	Elite + Silver
Dr. Hema Latha	MED	Elite
Dr. Gitasri Mukherjee	English	Elite



Faculty members being felicitated by the Governing Council on acquiring Ph. D. degree



Dr. Salma Fouzia of ECED felicitated by the Chairman and Hon. Secretary of SUES for being the first research scholar of MJCET to acquire Ph. D. degree

Faculty Achievements

- ✓ Dr. Qamar Sultana, CED: Inspirational Woman Award 2020 for academic leadership by the International Association of Research and Developed Organization.
- ✓ Dr. Mohd. Mahmood Ali, CSED: Recognized as Journal Editor on Publons.
- ✓ Prof. Md. Arifuddin Sohel and Dr. Md. Sabir Hussian, ECED: Invited as resource persons for delivering lectures in FDPs.
- ✓ Dr. Md. Sajid and Mr. Arshad Mohammed, EED, Prof. Ishrath MM and Mrs. NBV Lakshmi Kumari, MED, Mr. Abdul Raheem Junaidi, MED: Received best paper award in various National and International Conferences.
- ✓ Prof. Md. Arifuddin Sohel: Nominated as Secretary of IEEE Hyderabad Section for the period 2021-2022
- ✓ Prof. Mousmi Ajay Chaurasia, ITD: i. Significant Volunteer Service Award from IEEE Hyderabad Section ii. Publication chair and Convener of Biennial IEEE Hyderabad Section Conference iii. One of the 5 members for IEEE MGA training Committee for the year 2021
- ✓ Sayyada Hajera Begum, ITD: Recognized as a mentor for NPTEL course.
- ✓ Dr. J. Namratha Manohar, Dr. Md. Abdul Muqeet, EED and Dr. MGV Satyanarayana, Chemistry: Reviewers for Elsevier and Springer Journals
- ✓ Dr. Gitasri Mukherjee, English: Translator from English to Bengali for NPTEL lectures.

Qualification Improvement

- 7 Faculty members have acquired Ph. D. degree in the academic year 2020-2021.
- While two each are from CSED and ECED, one each are from CED, ITD and Physics

Dept.	Faculty	University
CED	Dr. M. Sridevi	JNTUH
CSED Dr. Fahmina Tarannum Dr. J. Srinivas		JNTUH
		JNTUA
ECED	Dr. M. A. Raheem	Gitam - H
ECED	Dr. Salma Fouzia	OU
ITD	Dr. Mohd. Pasha	JNTUH
Physics	Dr. Md. Raheem Ahmed	OU



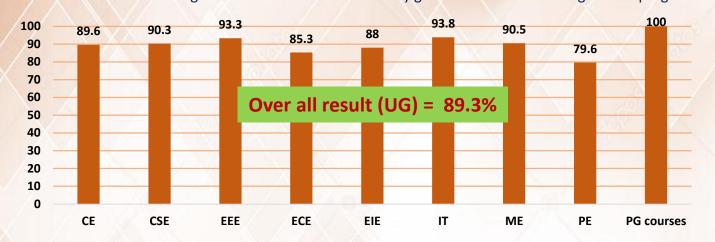
Prof. Ajay Mousmi Chourasia receiving the Significant Volunteer Service Award from IEEE Hyderabad Section



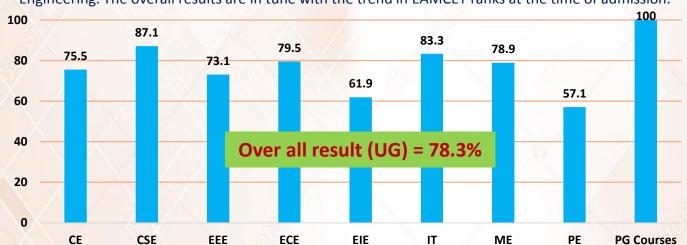
Inspirational Woman Award 2020 for academic leadership awarded to Dr. Qamar Sultana

ACADEMIC RESULTS

The results of batch which graduated in 2020 have been very good across all the undergraduate programs.



The overall Program Results (Average of 8 semesters) are also good except for EIE and Production Engineering. The overall results are in tune with the trend in EAMCET ranks at the time of admission.





UNIVERSITY RANKS

The class of 2020 has secured record 37 ranks in the OU merit list.

Top ranks in Civil Engineering, CSE, ECE, EIE, IT and Production

Engineering belong to MJCET

Course	No. of Ranks	Ranks Secured
Civil Engineering	4	1, 4, 8 & 9
Computer Science and Engineering	4	1, 2, 4 & 8
Electrical and Electronics Engineering	1	8 Record 6 out of 8
Electronics and Communication Engineering	2	1 & 5 top ranks
Electronics and Instrumentation Engineering	9	1, 3, 4, 5, 6, 7, 8, 9 & 10
Information Technology	3	1,6 & 9
Mechanical Engineering	8	2, 3, 4, 6, 7, 8, 9 & 10
Production Engineering	6	1, 3, 4, 5, 6 & 7

INTERNSHIPS

Though Placement Cell

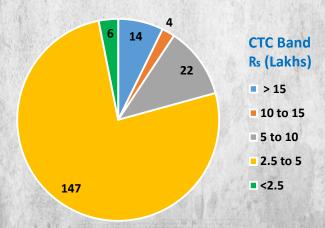
Section of the second sections				
Branch / Year	2020-21	2021-22	2022-23	Total
CE	4	2	3	9
CSE	14	12	4	30
EEE	2	3	2	7
ECE	15	3	1	19
EIE	0	2	0	2
IT_	15	10	2	27
ME	8	0	0	8
PE	2	0	0	2
Total	60	32	12	104

Through Internshala

India's biggest internship Platform on which students can chose companies for internship by filtering out between category (paid / unpaid), location, form of work and duration.

Branch / Year	2020-21	2021-22	2022-23	Total
CE	4	2	3	9
CSE	14	21	5	40
EEE	2	4	2	8
ECE	18	4	1	23
EIE	0	2	0	2
IT	19	15	2	36
ME	9	1	0	10
PE	2	4	1	7
Total	68	53	14	135

No. of students placed in different CTC bands



76% placed in Rs. 2.5 – 5 lakhs per anum CTC band

PLACEMENTS

Organization	No. Placed		
Infosys	41		
TCS	26		
Service Now	14		
Tech Mahindra	12		
Wipro	10		
Deliotte	8		
XIT solutions	8		
RAAM GROUP, Solar Bull (EEE/Mech)	4+4		
NTT DATA	6		
Multiplier solutions	6		
K12 Techno Services	6		
Visudhajivam Pvt Ltd	4		
Accenture	4		
Zemose Technologies	4		
Saras Analytics	3		
ADP , Data Beats	3+3		
i5 Systems (Core ECE)	3		
Inside view technologies	2		
IBI GROUP	2		
zycus Infotech pvt ltd	2		
Amazon, Face Prep	2+2		
Hexa ware Technologies	1		
Real Coders, Byju's	1+1		
TCS Digital , HCL Technologies	1+1		
Machint solutions	1		
Cap Gemini, Orgro Solutions	1+1		
Hitachi Consultants	1		
Mind Tree, S & P Global	1+1		
Wiley-Mthree, SYKES Business	1+1		
Total	193		
CTC PER ANNUM			

MAXIMUM

Rs. 21.18 Lakhs (Service Now)

AVERAGE

Rs. 5.57 Lakhs

MINIMUM

Rs. 2.4 Lakhs (Solar Bull)

RESEARCH PROJECTS

Applied under AICTE Quality Improvement Scheme (AQIS)

CIVIL ENGINEERING DEPARTMENT

Study on Improvement in Engineering

Title Properties of Bio-Concrete due to sequestration of Carbon Dioxide

Principal Investigator Prof. Ashfaque Jafari
Co-Investigator Mr. Toufeeq Anwar
Grant Applied for Rs. 25 Lakhs

CSE DEPARTMENT

Title

A novel Recommendation System for Predicting the RA Severity level check by Skin Lesion Using DCNN

Principal Investigator Prof. Uma N. Dulhare
Co-Investigator Prof. A. A. Moiz Qyser
Grant Applied for Rs. 12.72 Lakhs

ECE DEPARTMENT

Power Management Integrated Circuits Design and Analysis For Biomedical Implants

Principal Investigator Prof. Kaleem Fatima

Principal Investigator Prof. Kaleem Fatima
Co-Investigator-1 Prof. Arifuddin Sohel

Grant Applied for Rs. 24 Lakhs

Research Supervisors

Research Center	OU approved Supervisors	in Process
CE	4	1
CSE	6	0
EE	2	1
ECE		3
IT	0	1
ME	5	0
Interdisciplinary	0	1 (Physics)
Total	18	7



R & D PROJECTS DISPLAY LABORATORY

A new facility was created in Block V of MJCET for display and demonstration of the R & D projects undertaken by the students and faculty

AICTE-ISTE REFRESHER PROGRAMS

CSE DEPARTMENT

Title Future Insights by dividing into AI and amp, ML in healthcare & Apriculture

Program Coordinator Prof. Uma N. Dulhare Grant Applied for Rs. 3 Lakhs

MECHANICAL ENGINEERING DEPARTMENT

Title Nanotechnology Applications in Mechanical Engineering

Program Coordinator Prof. Ishrath M. Mirzana Grant Applied for Rs. 3 Lakhs

Other Funding Agencies

CHEMISTRY DEPARTMENT

Abetment of pollution in the yield of Biodiesel

Title and awareness of effects on used cooking oil on human health

Funding Agency SERB (SUPRA)

Principal Investigator Dr. Satyanarayana MGV

Co-Investigator Dr. V. Shanti Grant Applied for Rs. 5 Lakhs

Development of online portal for corrosion inhibitors database using theoretical values with cheminformatics tools

Funding Agency SERB (MATRIX)

Principal Investigator Dr. Satyanarayana MGV

Grant Applied for Rs. 5 Lakhs

INFORMATION TECHNOLOGY DEPARTMENT

Smart waste management for Covid-19 related primary health care centers and villages in remote areas

Funding Agency IEEE HAC, USA

Principal Investigator Prof. Mousmi Ajay Chaurasia

Dr. Amit Kumar, Director,

Co-Investigator BioAxis Pvt. Limited

Grant Applied for US \$ 4750

9

STUDENT TECHNICAL EVENTS

ROBOCON-2020



ABU-ROBOCON is organised by Asia-Pacific Broadcasting Union (ABU), a collection of over 20 countries of Asia Pacific Region. In view of the pandemic, the ROBOCON-2020 contest was held on 27-10-2020 in a virtual mode. This years Suva contest required the teams to make robot which plays rugby 7's game. MJCET team secured 1st position in South India and 12th position in National Ranking.

SAE Baja 2021 (Virtuals)





The SAE Baja 2021 competition was held in the virtual mode in view of the pandemic and hence there was no requirement of vehicle fabrication. The design phase was conducted virtually and MJCET secured 3rd position in Telangana. The second round consisted of endurance test which was also conducted virtually. Due to unforeseen circumstances, MJCET could not participate in the second round.

Drone Dancing Championship

The Drone Dance Championship was organized by Board of International Aviation Games (BIAG). Students of Electrical Engineering Department submitted a video entry which can be accessed at https://www.youtube.com/watch?v=2WVj6yjGvog. The results have not yet been declared.



NATIONAL SCIENCE DAY

National Science Day is celebrated in India on 28 February each year to mark the discovery of the Raman effect by Indian physicist Sir C. V. Raman on 28 February 1928. The Department of Basic Sciences and Humanities of MJCET organized webinars and debate in online mode in view of the pandemic.

The Keynote lecture was delivered by Prof. Soumyajyoti Banerjee of IIM-Bodhgaya

THEME

of

National Science Day- 2021

'Future of STI: Impact on Education Skills and Work'

The theme is an attempt at raising public appreciation of the impact of science, Technology and Innovation on education, skill and work. In the current scenario it signifies enhancement of learning experience through use of various technical gadgets leading to inclusivity inside and outside the classroom and collaboration at global level.





Professor. IIM, Bodh Gaya

On 27th Feb, 2021

2:00 pm to 3:30 pm

Link1:https://www.youtube.com/watch?v=dzfg6SVUwn0
Link2: Backup link
https://www.youtube.com/channel/UCceFSPvb0Xlg_d_OwE8mTtg/live
Registration Link:

https://forms.gle/iwtDxWQPSv99NFbh7

Contact Adnan Khan: 81068 54072 Anas Ilyas: 91215 67183 Platform: YouTube

Note: Participation certificates will be given.

Webinar	Date	Resource Person
Valuing the Valueless: Ethical Leadership for the Twenty First Century	27-02-2021	Prof. Soumyajyoti Banerjee, IIM-Bodhgaya
Role of Engineering in Space	01-03-2021	Dr. S . M. Ahmed, Principle scientific officer, University of Hyderabad
Role of Mathematics in emerging technologies	02-03-2021	Prof. H. P. Rani, Department of Mathematics, NIT-Warangal
Evolution of Scientific Methods	4 th Mar, 2021	Prof. Rajeevan PP, Indian Institute of Space Science and Technology(IIST) 11

CIVIL ENGINEERING DEPARTMENT

A MoU was formalized between M/s. JALL Water Treatment Solutions Private Limited, a Hyderabad based company specializing in providing innovative solutions in the area of water and wastewater management and MJCET. The MoU was singed on 16-12-2020 between the HoD, CED and Mr. Owais, CEO of JALL Water Treatment Solutions.

INFORMATION TECHNOLOGY DEPARTMENT

Between: BioAxis DNA Research Center Private Limited and Muffakham Jah College of Engineering and Technology

Representatives: Advisor Cum Director on behalf of MJCET and Dr. Amit Kumar, Director, BioAxis on behalf of BioAxis DNA Research Center.

Effective from: 20-01-2021

INFORMATION TECHNOLOGY DEPARTMENT

Between: Ashira Labs Private Limited and Muffakham Jah College of Engineering and Technology

Representatives: Advisor Cum Director on behalf of MJCET and Dr. Anil Kumar Reddy, Director, Ashira Labs on behalf of Ashira Labs Private Limited.

Effective from: 20-01-2021

PHYSICS DEPARTMENT

Between: Corning Incorporated and Muffakham Jah

College of Engineering and Technology

Representatives: Advisor Cum Director on behalf of MJCET and S.V.P. & Director, Global Research on behalf of Corning Incorporated. The confidentiality and non-disclosure agreement was digitally signed.

Effective from: 01-02-2021

Memorandum of Understanding (MoUs)



Advisor cum Director, MJCET and Dr. Amit Kumar, Director of BioAxis along with Head, ITD and faculty on the occasion of signing of the MoU with BioAxis DNA Research Center Pvt. Ltd.



Head of IT Department and Dr. Anil Kumar Reddy, Director of Ashira Labs on the occasion of signing of MoU with Ashira Labs



(MoUs)



The Hon. Secretary, SUES, Advisor cum Director, MJCET and Mr. B. Sidhant, CEO of Bindford on the occasion of signing of the MoU

ELECTRICAL ENGINEERING DEPARTMENT

Between: Binford Research Private Limited and Muffakham Jah College of Engineering and Technology

Representatives: Advisor Cum Director on behalf of MJCET and Mr. B. Sidhant, CEO, Binford.

Objective: To collaborate in design and development of next generation drones and offer internship to the students.

Effective from: 20-01-2021



Advisor cum Director and Dean Student Affairs of MJCET along with the Member Secretary of TSCOST and R & D cell members on the occasion of signing of the MoU

MJCET

Between: Telangana State Council of Science and Tehnology (TSCOST) and Muffakham Jah College of Engineering and Technology

Representatives: Advisor Cum Director on behalf of MJCET and Prof. Ravi Kumar Puli, Member Secretary, on behalf of TSCOST.

Objective: To collaborate in R &D projects with external funding in the areas of STI.

Effective from: 23-11-2020



Intellectual Property Rights (PATENTS)

GRANTED in 2020-21

Innovation Patent Title

Machine Learning And Iot-Based Smart Self Adjusting Potty Seat

1 Faculty

Dr. Mahaboob Shaik, Mr. Arshad Mohammed

Date Granted

28-09-2020

One utility patent (Solar Charka) was granted in 2019

Innovation Patent Title

Machine Learning-Based Smart Workout Mirror And Method Thereof

2 Faculty

Dr. Mahaboob Shaik, Mr. Arshad Mohammed

Date Granted

08-10-2020

College sponsors filing of patents for R & D projects

Design Patent Title

Stress Detection Cap

Faculty

Mr. Arshad Mohammed, Dr. Mahaboob Shaik, Dr. Uma N. Dulhare, Dr. G. Sailaja, Ms. Bibi Mariyam and Dr. Mohd. Abdul Mugeet

Date Granted

10-07-2020

Innovation Patent Title

AWS-Cloud Data Performance improvement using Machine and Deep Learning Programming

Faculty

Prof. M. Upendra Kumar

Date Granted

14-03-2021

4 utility patents are in the pipeline for filing by MJCET Innovation Patent Title

Machine Learning-Based Solar Tracking System And Method Thereof

Faculty

Mr. Arshad Mohammed

Date Granted

12-02-2021

Some faculty members file for patent on their own

19 (3 MJCET + 16 Faculty)

CSE, EE, IT and Mechanical Faculty

PATENT APPLICATIONS FILED

Design – 6 (3 MJ + 3 Faculty) and Innovation – 1 (Faculty)

Outreach Activities





Unnat Bharat Abhiyan (UBA)

The progress of work pertaining to UBA is progressing slowly in view of the pandemic. In the I semester of 2020-2021 the UBA team of MJCET has successfully completed the village survey in all the five selected Tandas and the information was uploaded on the UBA website after processing it. The work of household survey has been completed in four out of the five Tandas. Representatives of MJCET are in regular contact with the sarpanches over phone and WhatsApp during the second wave of the pandemic, and are guiding and motivating them to take precautionary measures to prevent the spread of Covid-19 disease.



STUDENT ACHIEVEMENTS

- Shaik Ehetesham and Shahebaz Ahamed of ECED created a platform for connecting the daily wage laborers to contractors during the ongoing pandemic. The app went live on August 1, 2020 and is available in English, Telugu and Hindi. It forms a bridge between the laborers and available work.
- ✓ Mohd. Parwez Alam of EED won the Best Paper Award at TECHNOVATION 2020 in December 2020.
- ✓ Mohd. Abdul Khadar, Mohd. Safwan Hussain and Shaik Fazil of ECED secured third position for the project 'Smart LPG Monitoring' at the Roboqube Hackathon organized by IIT-Hyderabad on 14-02-2021
- ✓ Mohd. Ameer, Syed Diraar, Fareha Fatima and Shahzaib Asher of ECED were runner ups for the project 'Smart Helmet' in Smart India Hackathon on January 19, 2021
- ✓ Mohd. Akef Ali of ECED published a paper in IEEE international Conference for Innovation in Technology in November 2020
- ✓ Karthik Guduru of IT secured teaching assistantship in School of Innovation India from Facebook

SPORTS

Shaik Sameer of Mechanical Engineering Department secured third place in the 53 Kg weight class at the junior power lifting championship on 24-01-2021. The event was conducted by Telangana Power Lifting Association affiliated to Power lifting India Olympic Association of Telangana and Sports Authority of Telangana

Mohammad Abrar Hussain of Mechanical Engineering Department

- ✓ Was awarded Gold Medal in the Senior Black Belt category at the 1st online open National Poomsae Taekwondo Championships – 2020 organized by UP TEAKWONDO and Sports Association on 18-10-2020
- ✓ Was awarded Gold Medal in A-18 Black Belt Speed Kicking championships in the 1st National Poomsae and speed kicking online TEAKWONDO Chamionship – 2021 organized by VIFA TEAKWONDO India







Muffakham Jah

College of Engineering and Technology

Mount Pleasant, Road # 3, Banjara Hills Hyderabad -500 034 www.mjcollege.ac.in

LATEST NATIONAL RANKING IN VARIOUS PUBLICATIONS



39th rank among top 200 best Engineering Colleges in India



58th rank among top 160 private engineering colleges in India and 33rd rank in south zone colleges



50th rank among top 175 best Government & Private engineering colleges in India, and 40th among top 125 private engineering colleges in India.



64th rank in top 100 private engineering colleges in India and 8th rank among colleges in Telangana State.

ACKNOWLEDGEMENT

The Advisor cum Director, Deans and HODs are thankful to the Sultan ul Uloom Education Society for its timely guidance during the last academic year. The contribution of faculty, staff and students in the academic success is acknowledged. We are also thankful to the print and electronic media for giving excellent coverage of activities and creating greater visibility of MJCET at State and National level