



ANNUAL REPORT 2019



Student members of Robotic Center at work

MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY

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 co-curricular 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

Advisor Cum Director

Dr. Basheer Ahmed

I/c. Principal

Prof. N. Seetharamaiah

Dean, Academics

Prof. Ashfaque Jafari

Dean Admin. & Student Affairs

Prof. Syed Ferhathullah Hussainy

Registrar

Mr. K. V. Narsimha Rao

Chief Librarian

Prof. B. Satyanarayana

Director Placements Cell

Mr. Arun Chandra

HODs

Civil Engineering

Prof. Md. Hamraj

Computer Science & Engineering

Prof. A. A. Moiz Qyser

Electrical Engineering

Prof. Mohammed Haseeb Khan

Electronics & Communication Engg.

Prof. Md. Arifuddin Sohel

Information Technology

Prof. Mousmi A. Chourasia

Mechanical Engineering

Prof. N. Seetharamaiah

Basic Sciences and Humanities

Dr. Abdul Majeed

Coordinators

Mathematics

Dr. Md. Abdul Rawoof Sayeed

Physics

Dr. Shaik Kareem Ahmed

Chemistry

Dr. V. Shanti

English

Dr. Shabana Tahniath

M.E. CAD/CAM

Prof. Shaik Khader Vali

M. Tech. CSE

Prof. Uma N Dulhare

M.E. Digital Systems

Prof. Nazia Parveen

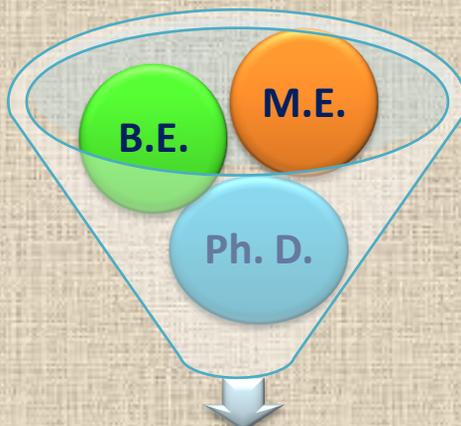
M.E. Power Electronic Systems

Mr. J. V. R. Vithal

M.E. Structural Engineering

Prof. Md. Abdullah Sharieff

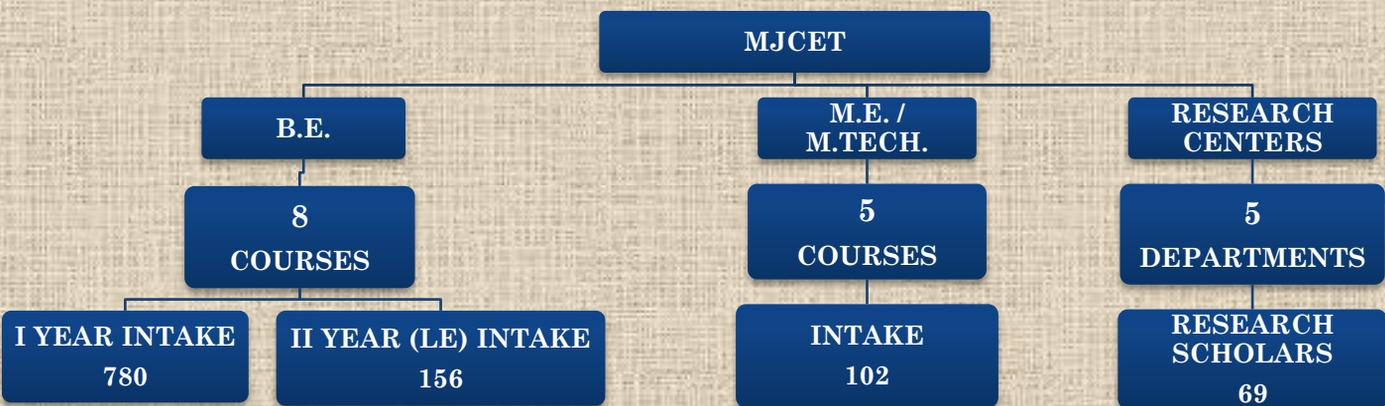
COURSES AND INTAKE



Total Students on Rolls

3513

Sanctioned Intake



CE	120
CSE	120
EEE	60
ECE	120
EIE	60
IT	120
ME	120
PE	60

CAD/CAM	18
CSE	24
DS	24
SE	18
PES	18

CE - 14
CSE - 08
EE - 08
ECE - 13
ME - 26

CE Civil Engineering
 CSE Computer Science and Engineering
 EEE Electrical and Electronics Engineering
 ECE Electronics and Communication Engineering
 EIE Electronics and Instrumentation Engineering
 IT Information Technology

ME Mechanical Engineering
 PE Production Engineering
 DS Digital Systems
 SE Structural Engineering
 PES Power Electronic Systems
 CAD/CAM Computer-aided Design and Computer-aided Manufacturing

FACULTY DETAILS

Civil Engineering Department	<table border="1"> <tr><td>TOTAL</td><td>25</td></tr> <tr><td>Professors</td><td>5</td></tr> <tr><td>Associate Professors</td><td>4</td></tr> <tr><td>Assistant Professors</td><td>16</td></tr> </table>	TOTAL	25	Professors	5	Associate Professors	4	Assistant Professors	16
TOTAL	25								
Professors	5								
Associate Professors	4								
Assistant Professors	16								
Computer Science and Engineering Department	<table border="1"> <tr><td>TOTAL</td><td>31</td></tr> <tr><td>Professors</td><td>4</td></tr> <tr><td>Associate Professors</td><td>6</td></tr> <tr><td>Assistant Professors</td><td>21</td></tr> </table>	TOTAL	31	Professors	4	Associate Professors	6	Assistant Professors	21
TOTAL	31								
Professors	4								
Associate Professors	6								
Assistant Professors	21								
Electrical Engineering Department	<table border="1"> <tr><td>TOTAL</td><td>26</td></tr> <tr><td>Professors</td><td>3</td></tr> <tr><td>Associate Professors</td><td>5</td></tr> <tr><td>Assistant Professors</td><td>18</td></tr> </table>	TOTAL	26	Professors	3	Associate Professors	5	Assistant Professors	18
TOTAL	26								
Professors	3								
Associate Professors	5								
Assistant Professors	18								
Electronics and Communication Engineering Department	<table border="1"> <tr><td>TOTAL</td><td>28</td></tr> <tr><td>Professors</td><td>4</td></tr> <tr><td>Associate Professors</td><td>2</td></tr> <tr><td>Assistant Professors</td><td>22</td></tr> </table>	TOTAL	28	Professors	4	Associate Professors	2	Assistant Professors	22
TOTAL	28								
Professors	4								
Associate Professors	2								
Assistant Professors	22								
Information Technology Department	<table border="1"> <tr><td>TOTAL</td><td>22</td></tr> <tr><td>Professors</td><td>2</td></tr> <tr><td>Associate Professors</td><td>3</td></tr> <tr><td>Assistant Professors</td><td>17</td></tr> </table>	TOTAL	22	Professors	2	Associate Professors	3	Assistant Professors	17
TOTAL	22								
Professors	2								
Associate Professors	3								
Assistant Professors	17								
Mechanical Engineering Department	<table border="1"> <tr><td>TOTAL</td><td>36</td></tr> <tr><td>Professors</td><td>9</td></tr> <tr><td>Associate Professors</td><td>4</td></tr> <tr><td>Assistant Professors</td><td>23</td></tr> </table>	TOTAL	36	Professors	9	Associate Professors	4	Assistant Professors	23
TOTAL	36								
Professors	9								
Associate Professors	4								
Assistant Professors	23								
Basic Sciences and Humanities + Engineering Graphics	<table border="1"> <tr><td>TOTAL</td><td>29</td></tr> <tr><td>Professors</td><td>0</td></tr> <tr><td>Associate Professors</td><td>1</td></tr> <tr><td>Assistant Professors</td><td>28</td></tr> </table>	TOTAL	29	Professors	0	Associate Professors	1	Assistant Professors	28
TOTAL	29								
Professors	0								
Associate Professors	1								
Assistant Professors	28								



Total Faculty = 197

Faculty with Ph. D.
50
(25.5%)

Faculty Pursuing Ph. D.
86
(43.9%)

FACULTY DEVELOPMENT





Elite
NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
NAZEERUNNISA

for successfully completing the course
**Principles of Signal Estimation for MIMO/ OFDM
Wireless Communication**
with a consolidated score of **92 %**

Online Assignments	24.06/25	Proctored Exam	67.5/75
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Total number of candidates certified in this course: **94**

T.V. Prabhakar
Prof. T. V. Prabhakar
Chairman
Center for Continuing Education, IITK

Jul-Oct 2018
(12 week course)

Satyaki Roy
Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur



Indian Institute of Technology Kanpur



Roll No: NPTEL18EE21521381663 To validate and check scores: <http://npTEL.ac.in/noc>

Award of Ph. D. Degree

1. Dr. Rafi u Zaman, CSED
2. Dr. Hakeemuddin Ahmed, MED
3. Dr. Md. Imran, CSED
4. Dr. M. A. Rawoof Sayeed, Mathematics
5. Dr. D. Srinivas Rao, MED
6. Dr. Md. Sajid, EED

Publications

- Journals – 70
- Conferences – 49

Participation

- Seminars – 46
- Workshops / FDPs – 35



NPTEL is an acronym for ‘National Programme on Technology Enhanced Learning’ which is an initiative by seven Indian Institutes of Technology and Indian Institute of Science for creating course contents in engineering and science.

NPTEL web and video courses across 23 disciplines are available on their portal. Joining a course is free. There are no pre-requisites, no age limit, no entrance criteria to enroll.

Learning is done by watching videos and this is tested by the weekly assignments, that are to be submitted online within the prescribed deadline.

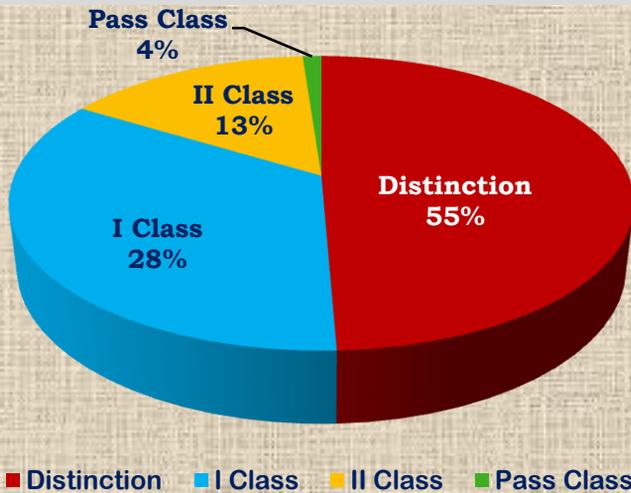
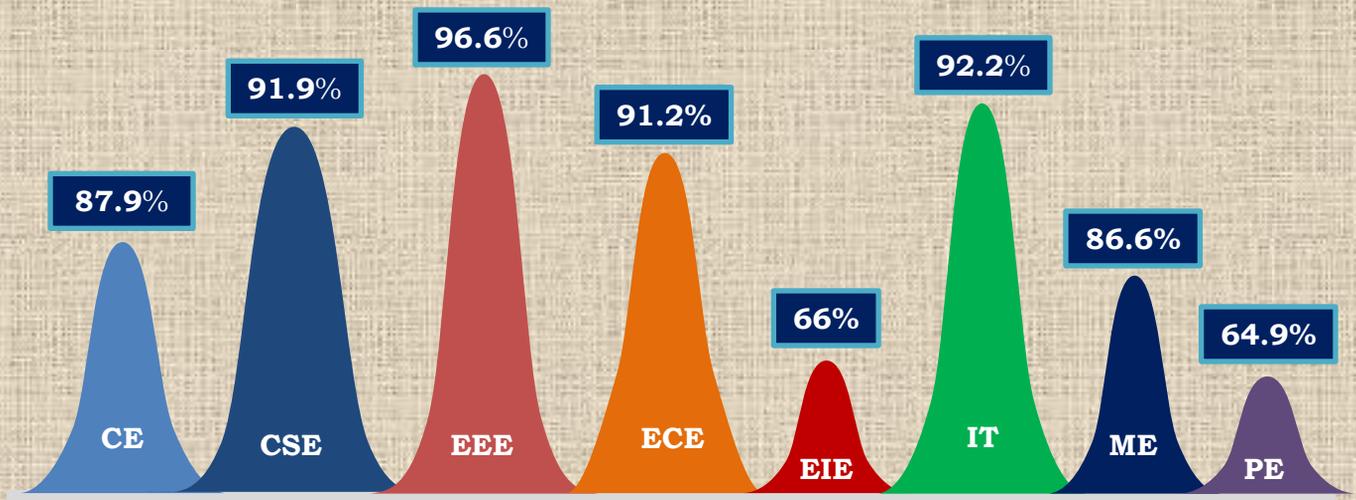
There is an optional proctored certification exam that the learner can take for a nominal fee at the end of the course to earn certificates from the IITs. 25% of the final marks comes from the Assignments and 75% from the final exam.

The main benefits of participating in an online course under NPTEL are:

1. Students: credit transfer and better resume
2. Faculty: Refresher courses, AICTE recognized FDP courses

No. of faculty enrolled	140
No. of registration for certification	105
No. of faculty qualified so far	31
Gold	2
Silver	1
Elite grade	14
Pass grade	14

RESULTS AND RANKS 2017-2018 B.E. COURSES



OU Ranks - 2018

**I Rank in
CSED
ECED
IT
Production**

**M.E./M. Tech.
COURSES**

**100%
Result**

Course	No. of Ranks	Ranks Secured
Civil Engineering	4	4, 6, 8, & 9
CSED	5	1, 2, 7, 8, & 9
EEE	2	4 & 9
ECED	5	1, 2, 4, 5, & 9
EIE	4	2, 3, 4, & 5
Information Technology	6	1, 3, 6, 7, 9, & 10
Mechanical Engineering	7	2, 3, 5, 6, 8, 9, & 10
Production Engineering	1	1
TOTAL	35	

PLACEMENTS 2018-19

Company	# of offers
Infosys	78
TCS	22
Value Labs	14
Amazon (Customer Service)	36
Wipro	09
Cognizant Technologies and NTT Data	07 + 07
Genpact	24
Xtream IT	05
Axness Technologies	12
Deloitte ITS Canada	01
PH Technologies and Acuvate	03 + 03
Service Now	03
HCL, Cyient, RAAM Group and Custom Furnish	01 + 04 + 02 + 04
Total	235

Highest Offer

Rs.10.92 Lakh / anum (Service Now)

Average Offer

Rs. 3.75 Lakh / anum



R & D Projects

Budget for in-house R & D Projects (2018-2019)	Rs. 12 lakh
No. of Project Proposals received for funding	19
No. of Projects approved by R & D Committee	14
Amount sanctioned for the year 2018-2019	Rs. 10.11 lakh

S. No.	Project Title	Departments	Amount Sanctioned (Rs.)
1	Experimental Study of Effect of Fibre Density (I) and Flexural Performance(II)on Shear strength of RC Beams with externally bonded FRP Wraps	CED	1,00,000
2	Humanoid Robot Phase-3	ECED	1,00,000
3	IoT based vehicle parking system with cloud computing	EEED	20,000
4	Wall Climbing Robot for Surveillance with AI	ITD	31,050
5	Trebax Chess Board	ITD	23,700
6	Six Legged ROV	MED	1,19,000
7	Flexible Manufacturing System	MED	85,491
Multi-disciplinary Projects			
8	The Next Generation Band	ITD + MED	37,000
9	Wanderway - An improved Segway	MED + ECED	88,000
10	Synthesis and Characterization of Nano Magneto - rheological fluids for engineering applications	MED + Chemistry	50,000
11	Laser Engraver	MED + ECED	97,000
12	3-D Map Generating Autonomous BOT	MED + ITD	75,000
13	GIMMIC – A Semi-Humanoid Face Recognition Robot	ECED + MED	1,00,000
14	Biodiesel Extraction- Phase 5- Automation of Biodiesel Pilot Plant using Continuous flow process	Chemistry + MED + EED	45,000



Six Legged ROV



GIMMIC – Semi-humanoid

ENGINEERING PROJECTS EXPO ADSOPHOS-2019



Trebax Chess Board developed by IT Department students



Laser Engraver developed by MED and ECED students



Kaleshwaram Irrigation Project model fabricated by CED students



The next generation Band developed by ITD and MED students



IoT based vehicle parking system with cloud computing feature demonstrated by EED students



Indoor Automated Navigation Assistance System for the Blind developed by ITD students

ENGINEERING PROJECTS EXPO ADSOPHOS-2019



Automated Biodiesel Extraction process demonstrated by MED and EED students



UV absorption method for glass manufacture d by ECED students



Smart city model demonstrated by CED students



Xian Smog Tower for air purification demonstrated by CED students



Display of 'Great Urtuu' a 4-legged autonomous robot fabricated for ROBOCON contest and Improved Segway – an R & D Project

NEW INITIATIVES



SU Center for Innovation and Incubation (MJ Hub)

MJCET has established 'MJ Hub' in November 2018 aimed at shaping the innovation ecosystem in the campus and to encourage 'startup' culture.. An 'Ideation Contest' and 'Critical Design Thinking Workshop' were organized to create awareness about the newly established centre. Three startups, namely, Trindec Technologies, Infinzi Pvt. Ltd. And Ro-biotics were recently registered by the students



Unnat Bharat Abhyan

MJCET has been approved as a participating institute (PI) in UBA. The Government of India has launched the UBA with a vision of transformational change in rural development by leveraging knowledge institutions to help build the architecture of an inclusive India. As part of the initiative, the college has adopted five villages in Sangareddy District. Village level survey has been completed and future work will be taken up after vacations.



NPTEL

MJCET has set up a local chapter of NPTEL with Prof. Mousmi Ajay Chaurasiya as the 'Single Point of Contact' of the local chapter. She was deputed to the one day workshop organized by IIT Madras in January 2019. The facility permits anyone to register and do an online certification course from NPTEL and get a certificate from IITs.

NEW INITIATIVES



B.E. I Semester Induction Program

AICTE has introduced a mandatory three week induction program for I semester students to help them to adjust and feel comfortable in the new environment, and bond with the other students and faculty. MJCET has conducted the induction program wherein the freshers were addressed by several other eminent personalities from industry, administrative services and academicians. Physical activity was also a part of the induction program.



R & D Projects / Products identified for filing of patent application

- i. MR fluid damper
- ii. MR fluid Clutch
- iii. Pneumatic Quadruped Robot
- iv. Bio-Diesel project
- v. KVAR STATCOM and
- vi. IoT based Smart 3D printer

PATENTS

MJCET has signed an MOU with a consulting firm, 'Prometheus Patent Services Pvt. Ltd.' to assist the faculty and students in documentation and filing of application for patenting their inventions. A seminar on IPR was conducted by the consultant on December 13, 2018 for creating awareness. The college has formed Patents and external funding committee to identify patentable inventions and streamline the process.

Recently the patent for Solar Powered Spinning Wheel has been published in the name of MJCET.

FACULTY ACHIEVEMENTS



Dr. Shaik Kareem Ahmed Coordinator, Physics

Reproduced the working model replica of 'Sir J C Bose Millimeter Wave Experiment'. The project was sponsored by IEEE in association with World Trade Center, Bangalore, on the occasion of the 160th anniversary of Sir Jagadish Chandra Bose on 17th February, 2019.

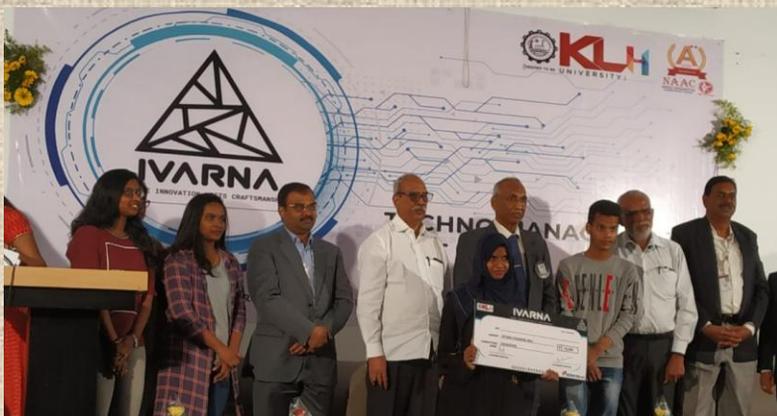


Prof. Mousmi Ajay Chaurasia, Head, ITD

Graduated from IEEE Volunteer Leadership Training Program (VoLT) conducted by IEEE headquarters, USA. She is one of the seventy participants selected globally from USA, London and Latin American countries to complete the program.

- ✓ **Prof. Mohammed Arifuddin Sohel Head, ECED**, served as Finance Chair for the 3-Day IEEE International Conference on 'Modeling of Systems Circuits and Devices' at IIIT Hyderabad in February 2019
- ✓ **Prof. Kaleem Fatima, ECED**, Co-chaired a tutorial session during the 3-Day IEEE International conference on 'Modeling of Systems Circuits and Devices' at IIIT Hyderabad in February 2019
- ✓ **Prof. Shaik Qadeer, EED** has published a patent titled 'Mileage Measurement and Fuel Forecast System with Fuel Tracking Provision and a Method Thereof'.

STUDENT ACHIEVEMENTS



24 Hour Hackathon at KLU, Hyderabad (March 2019)

Mr. Mohd Abdul Khader (ECE I year) and Ms. Varha Khan (CSE III Year) won First Prize (Rs 15000) for Project “ IoT based Smart Toilet Monitoring System’



‘Imagine Hack’ organized by Microsoft students’ Academy, MJCET

Mr. Hadi Ali and Mr. Md. Azeem, III Year IT students won Second Prize (Rs 6000) for Project “ Face recognition System using Python-Open CV’

Dublin university, ireland February 2019

3 Students from EEE and 2 from IE have been awarded “The Academic Excellence Award” by Education Matters associated with Dublin University Ireland

National Award for Students - 2018 Awarded by Institute for Steel Development and Growth for Civil Engineering Project

4 Students from CED participated and won the Zonal Round and Secured Consolation Prize in Final Round at National Level

ICFAI – Conference of Nations (25-27 Jan 2019)

Mr. Mohd. Abdul Khader, of ECE I year participated in the conference and won “Special Mention Award” in International Court of Justice

Anveshna 2019

Project Competition (January 2019)

Mr. Moghal Abdul Sameer Baig and Ms. Rizwana Tabassum of ECED demonstrated the project “Sluice Rivulet Ganga Bot” and secured consolation Prize.

Acumen ECE 2K19 – Project Expo (14-03-2019)

A six member team of II Year ECED students participated in Project Expo and won the First Prize for presenting their project work on “Smart Suitcase”.

GATE RESULTS

13 students of Civil Engineering and 1 of ECE qualified in GATE 2019

ACADEMIC ACTIVITIES



6-Days IEEE CIS Summer School on Computational Intelligence

IT Department in collaboration with IEEE CIS Hyderabad Section organized a 6-day summer school on Computational Intelligence during 22-27 November 2018. This program was sponsored by IEEE US Headquarters for USD 11000. Resource persons were drawn from foreign universities from USA, Canada, Australia, Italy, Slovenia, and Singapore.



2-Days Hands on Workshop on IoT and Drones

Sponsored by IEEE Standard Associate Bangalore and Organized by ECED
(03-04 October 2018)



ACADEMIC ACTIVITIES



Computer Science and Engineering Department

Conducted a One Week Faculty Development Program (FDP) on 'Data Science Technologies and Artificial Intelligence' during 03-08 January, 2019.



Electronics and Communication Engineering Department

Established 'Verification and Validation Laboratory for IoT' in February 2019. This lab was set up by IEEE Hyderabad Section for testing of IEEE 1451 standard on IoT



Electrical Engineering Department

Conducted a One Week ICT based Short Term Course on 'Machine Health Monitoring Using IOT' during March 25-29, 2019 in association with NITTTR, Chandigarh.

STUDENTS ACTIVITIES



Microsoft Student Society and CSED

Organized a 9-hour Hackathon titled 'Imagine Hack – 2019' on 23-24 February, 2019. 43 teams registered for the event.

After two rounds of programming, three teams were declared winners.



CSI Chapter in association with XTremeIT

Organized a 14-hour Hackathon titled 'Hack Revolution – 2019' on January 27, 2019. 40 teams registered for the event. About 150 students from various colleges participated in the event.



E-Cell MJCET

The E-Cell of MJCET was formed to promote entrepreneurial skills of the students by exposing them to the broad perspective through lectures, competitions and activities. It organized E-Week 2019 during Adsophos festival.

STUDENTS ACTIVITIES



SAE MJCET Chapter of MED

Organized an Engine Assembly workshop for the students of Mechanical and Production Engineering in February 2019.

Live demonstration of disassembling and reassembling of the IC engine for a first hand experience of real work applications.



EWB Chapter MJCET

Organized a conference on Technologies for Sustainable Ecosystem in March, 2019. Dr. Showkath Ali Mirza, Director, EWB India was the chief guest of the conference. The proceedings have been published in JETIR, a UGC recognized journal.

Miscellaneous Activities

- ✓ IEEE Students chapter organized a 1-Day workshop on '**Digital Image Processing using MATLAB**' in July 2018.
- ✓ IEEE CS chapter organized a 2 Day workshop on '**Machine Learning using Python**' in September 2018.
- ✓ IEEE PES chapter organized a seminar on '**Renewable Solar Energy and its Future**', in February 2019.
- ✓ A 2-Day training program on **HAM Radio** was organized by ECE Department in August 2018. A total of 151 participants attended the training.
- ✓ A four day **CODECAMP** was organized by CSI-MJCET chapter in September 2018. Software developers form XtremeIT conducted full day sessions for the participants.

EVENTS

**Academic Awards Function - 2018**

The Academic Awards Function – 2018 was organized on 29-08-2018 in order to give away Gold and Silver Medals to the top three students in each branch of B.E. and M.E. The chief guest Prof. E. Suresh Kumar, VC, EFLU, Hyderabad presented the gold medals.

**Orientation Program- 2018**

The event was organized on 31-07-2018 for the B.E. first year students after they had undergone a three week mandatory induction program. Mr. Navin Mittal, IAS, Commissioner Technical Education, Government of Telangana was the chief guest.

**Mini Project Exhibitions**

The CSE and IT Departments organized their annual mini project exhibitions in which students displayed their technical skills through projects. In 2019, Innovatia Panoply of CSED and Envisage of IT Department were held simultaneously on 30-03-2019

- Engineers Day 2018** was celebrated on **15-09-2018** by conducting technical talks and essay writing competition in all the Departments
- National Science Day 2018** was celebrated on **28-02-2019**. It was organized by the Basic Sciences and Humanities Department with Dr. Ch. Subrahmanyam of IIT Hyderabad as the Chief Guest

GAMES AND SPORTS



Championships Won

Chess Team (Boys)

Osmania University Inter College Chess Tournament
[25 and 26 Sep, 2018]

Carrom Team (Boys)

Singles and Doubles in State level Carrom Tournament
[16 and 17 September 2018]

Badminton (Girls)

MVSR Inter Engineering Singles and Doubles Tournament
[15 and 16 March, 2019]

Runners up

Lawn Tennis (Boys)

O.U. Inter College Tournament
[6 November 2018]

Football Team (Boys)

National Level Inter Engineering Football Tournament
[12-17 November 2018]

Volley Ball (Boys)

National Level Inter Engineering Volley Ball Tournament
[18-20 September, 2018]

Snooker

AIRO – 2019
[22-24 February, 2019]

Events Organized

OU Inter College Lawn Tennis (Men) Tournament
6th November 2018

MJCET Girls Sports Fest
3rd February 2019

INFRASTRUCTURE DEVELOPMENT

Installation of 2 Lifts in Block V (Capacity: 9 Persons, Weight: 612 Kg Each)
Expenditure: 36 Lakhs (Civil Works and Installation)
(Work in Progress)

MJCET Arch for Campus Demarcation
Expenditure: 5.62 Lakhs

Smart Classrooms (2 Nos, One each in ECED and ITD)
Expenditure: 10 Lakhs (Work in Progress)

Procurement of 85 Computers
(i3 8th Generation, 8GB RAM, 1TB HDD, 20 inch LED Monitors)
Expenditure: 27.88 Lakhs

Establishment of NPTEL Lab
(30 Users capacity Lab with Latest Configuration Computer Systems)
Expenditure: 6.69 Lakhs (Civil Works & Furniture) (Work in Progress)

Procurement of Two 75 Inch Smart Boards
Expenditure: 5.47 Lakhs

Renovation of Ladies Washrooms (Block I, Ground Floor)
Expenditure: 3.5 Lakhs

Procurement of 228 Computer Lab Chairs
Expenditure: 5.11 Lakhs

Plastering of MJCET Compound Wall
Expenditure: 2.58 Lakhs

National Ranking – 2018

OUTLOOK

62nd

Among Top 100 Government and Private Engineering Colleges in India

THE WEEK

56th

Among top 100 Private Engineering Colleges in India

Ranking of 2019 has not yet been released by the above publications

ACKNOWLEDGEMENT

The Advisor cum Director, I/C Principal, 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 Print and Electronic Media for giving excellent coverage of activities and creating greater visibility of MJCET at State and National level.

MJCET MEDIA COVERAGE



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Mount Pleasant, Road # 3, Banjara Hills
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www.mjcollege.ac.in



