SPARK

YEARLY NEWSLETTER DEPT OF EEE

<u>Overview</u>

- DEPARTMENT VISION **MISSION**
- PRINCIPAL'S DESK
- HOD'S DESK
- STUDENTS SPEAK
- COVID 19
- FACULTY ACHIEVEMENTS

EDITORIAL BOARD

CHIEF EDITOR

DR.P. RAM KISHORE KUMAR REDDY Professor & Head - EEE

Staff Editor:

Mr. P. Pradyumna

Assistant Professor EEE

Mr. S. Abhishek Reddy

Assistant Professor - EEE

Student Editors:

T.GOUTHAM **K.RESHMA** R.DEEKSHA

DEPARTMENT VISION&MISSION



DEPARTMENT VISION

The Electrical engineering
Program emphasizes design,
innovation, real world
applications of evolving
technologies, and simulation
of real time systems along
with developing
entrepreneurial capabilities
by providing excellent
Electrical Engineering
Education.

DEPARTMENT MISSION

The Electrical engineering Program emphasizes design, innovation, real world applications of evolving technologies, and simulation of real time systems along with developing entrepreneurial capabilities by providing excellent Electrical Engineering Education.



PRINCIPAL'S DESK



It is with profound sense of pride and pleasure that we present you this very special volume of SPARK. Every page unfolds a plethora of the abundant creative and literary talents of our ever enthusiastic students. You can feel the pulse of this great institution as the pages reveal our students capabilities. SPARK is truly the systematic product of a team of people. I am delighted to present you through these pages our students' thoughts, attitudes and aspirations. These young shining stars with their well embedded roots and spreading wings are the promise of a great tomorrow. This institution serves as a springboard from where they can unleash their true potential. I encourage everyone to go through this wonderful masterpiece of MGITians, whose quality ideas and contributions made this edition of SPARK colorful and readable.

Prof. K. Jaya Sankar

Principal

HOD'S DESK



The department of Electrical and Electronics Engineering was established in the year 2002 with an objective to develop professionals through quality education with an intake of 120 students. The EEE Department at Mahatma Gandhi Institute of Technology prepares students in this field using new-age information and computer-intensive technologies. The B.Tech. and M.Tech programs are designed to achieve a balance between depth of knowledge acquired through specialization and breadth of knowledge gained through exploration. The courses offered by the department provide a comprehensive foundation in the core topics of EEE coupled with an area of specialization relevant to emerging engineering challenges. The faculty in the department is a rich blend of personnel with industrial and professional experience. The dedicated staff members have sound knowledge in emerging areas like Power systems, power electronics, microelectronics, and control engineering, etc. The breadth and depth of the research interests of the academic staff ensures a high standard of lecture courses and provides excellent opportunities for challenging and stimulating final year projects. All faculty supplement their delivery using videos, animations overhead projectors. The faculty keeps up with the latest technologies by publishing in reputed journals and presenting at various national and international conferences. The students are not far behind. The students have made us proud by winning the best project award in National level technical project exhibitions. The EEE Department also holds several guest lectures, seminars and workshops. These provide a platform for the staff and students to share their views and experience among industrialists, fellow researchers, and academicians in the emerging areas of electrical engineering. On employability, graduates of the institute consistently appear as the first choice of employers. Studying EEE will lead to potential careers in the areas of Research & Development (R&D), design, systems analysis, control and manufacturing, quality assurance and testing. The department boasts of having many Assistant Engineers and Assistant Executive Engineers working in the electricity department of both Telangana and Andhra Pradesh governments. Students pursuing master's abroad have made us proud by taking up niche positions in various companies.

> Dr. P Ram Kishore Kumar Reddy HOD Dept. of EEE

STUDENTS SPEAK

It is that my first day of college in offline mode, the students of my batch has spent more than 2-semesters in online mode, we shared screens from closed spaces. I met my graduation friends in my second year which will be a regret part of my life, I wish that it should never happen to any of the future upcoming batches. It has been only 2 weeks since my graduation life has started even though I enjoyed a lot. Interaction with seniors and facility members has created some unforgettable memories in my life. During virtual classes we are addicted to mobile phones, but in real time classes I realized that I hadn't used my mobile for almost 5 hours. Most of my friends stay near by college talking with them while coming to college, playing games together and going back created a strong bond between us.

-P. PRAKASH-

It has no secret that COVID-19 has impacted the entire world in 2020. Every industry and work has been affected by the ongoing pandemic and the education system is one of the many. For uninterrupted classes institutions have opted a new route i.e., online classes. During virtual classes, we had missed the little connections like giving eye contacts and giggle with our friends. These memories were finally created on our first day after pandemic. We are addicted to mobiles during pandemic, at present I realized that I hadn't used my mobile for almost five hours. Most of my friends stay in hostels which are near by college during travelling together, chatting, sharing thoughts and going back has strengthened our bond. We are going all out to create more memories has vanished the dissatisfaction of pandemic.

-M. KOUSHIK KRISHNA-

COVID 19

COVID-19 virus emerged and turned lives upside down, the enduring global pandemic continues to impact lives fundamentally. As countries clamber for vaccines to reach the most vulnerable, the concealed negative effect on young people may turn out to be the most significant untreated hazard in the years to come. The consistently inconsistent societal and learning landscape is leaving young people feeling uncertain and anxious, leading to a potential mental health and educational emergency for an entire generation

EFFECTS OF COVID 19 ON STUDENT EDUCATION:

The global lockdown of higher education institutions due to COVID-19 has led to major modifications in the way education is delivered. While students were enrolled in traditional learning environments before the pandemic, delivery modes changed quickly into online or remote learning environments mid-semester at the onset of the coronavirus. Many students experienced different emotions and challenges in response to the disruption. This study explored those experiences from the graduate students' perspective. Qualitative methods were used to analyze graduate student reflections across the Spring 2020 semester during the COVID-19 pandemic (n = 7). The reflection papers captured the students' fears, frustrations, anxieties, and concerns over six weeks. The outcome of the study identified five key themes —accepting virtual learning and teaching; managing disappointment; experiencing loss of power and control; feeling anxious and fearful; and incorporating coping strategies and finding relief. Most study participants expressed concern over the effectiveness of the online learning environment, while others struggled with the possibility of not seeing their colleagues physically in class.

COVID 19

There was a general feeling that students did not have control over what they did and the uncertainty over the coronavirus proved difficult to manage. The study participants proposed a few coping strategies, including finding enough space to work and connecting with others for emotional support. This work contributes to the growing body of studies on COVID-19 and its impact on students.

SCENARIO OF VIRTUAL CLASSROOM:

Online learning is rapidly becoming one of the most effective ways to impart education. The impact of the virus was so strong that online education became a seemingly ubiquitous part of our growing world, which resulted in the closure of schools and no further physical interaction of teachers with students. Fortunately, soon enough most of the schools and educational institutions moved to online mode to resume their studies. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely on digital platforms instead of physical classrooms.

For students, online classes have become an imminent trend in the education sector around the globe. Digital learning has provided easy access to the files and folders that can now be organised and saved without any physical damage. With one click, students can access their notes and assignments without the fear of misplacing or spoiling them. With advanced technology, this mode of learning has not only been simpler but fun and engaging as well. Technology-enabled learning is beneficial and has proven to be more engaging as it helps in making those subjects interactive and fun which are traditionally considered dull by students. It became very convenient for the students to attend classes from anywhere in the world as both classes and learning content was easily accessible at home.

COVID 19

Integration of the learning platforms with new-age interactive applications has made online classes more convenient for both students and teachers as more students are able to express their views at the same time using certain online applications. Students have been more particular with their online submission as they are notified on a regular basis and it is an effortless task for the teachers to track down the students who have failed to submit their assignments on time. Online learning has helped students to become independent learners before they make their way into the real world. Students got opportunities to explore new learning applications and platforms during the class, which helped them to develop new skills and capabilities accelerating their growth trajectory. Some of the students have been responding well to the active learning environment created online by the teachers whereas others need a push in fits and starts





FACULTY ACHIEVEMENTS

| S.NO: | NAME OF THE FACULTY | PPROGRAMME | TOPIC | PLACE | DATE(S) |
|-------|---------------------------------|-------------------------|---|--|-------------------------------------|
| 1 | Dr.P.Ram Kishore Kumar Reddy | Webinar | Electrical Maintenance in Heavy Manufacturing Industries | MGIT, Hyderabad | 17-07- 2020 |
| | | FDP | Controller Hardware-in-the- Loop Simulation Tool: for Future Electrical Engineers | MGIT, Hyderabad | 24-07- 2020 |
| | | STTP | Trends and Challenges of Hybrid Electric Drive Utilities in Transport Sector | CBIT,HYDERABAD | 03-08- 2020 to 08-08- 2020 |
| | | ATAL FDP | Energy Engineering | Velammal Engineering College, Chennai | 17-09- 2020 to 21-09- 2020 |
| 2 | Dr.P.Chandrasekhar | FDP | Role of Machine Learning & Data Sciences in AI | MGIT, Hyderabad | 28-06- 2020 to 2-07-2020 |
| | | FDP | Yoga - A Science of Breath and Meditation for Subtle Energy Channeling | | 06-07- 2020 to 10-07- 2020 |
| | | FDP | AI Techniques to Electrical Engineering | UGC-HRDC, JNTUH, Hyderabad | 06-07- 2020 to 10-07- 2020 |
| | | FDP | Real-Time Aspects of Power System Scenario | MGIT, Hyderabad | 06-07- 2020 to 10-07- 2020 |
| 3 | Dr.P.Nagasekhar Reddy | Webinar | Magnetic Levitation and High Speed Trains | MGIT, Hyderabad | 01-07- 2020 |
| 4 | Mrs.N.Madhuri | AICTE Sponsored STTP | Integration, Storage and Control in Hybrid Energy System (HES) | Geetanjali College of Engineering and Technology, Hyderabad | 3-08-2020 to 8-08- 2020 |

FACULTY ACHIEVEMENTS



| 5 | Mr.B.N.Reddy | FDP | Real Time Aspects of Power System Scenario | MGIT, Hyderabad | 06-07- 2020 to 10-07- 2020 |
|---|---------------------|-----------------------------------|---|--|-------------------------------------|
| 6 | Mrs.P.V.B.Kumari | Short Course | Learn to design your own Solar Home system | Energy Swaraj Foundation | 02-08- 2020 |
| 7 | Mrs.P.L.Supriya | Faculty Development Program | The Development of the Energy Internet of Things (eIOT) in Green Energy Infrastructure | National Institute of Technology, Silchar | 01-09- 2020 to 05-09- 2020 |
| 8 | Mrs. M. Nalini Devi | Refresher Course | Geospatial inputs for enabling master plan formulation | ISRO, Dehradun | 27-07- 2020 to 31-07- 2020 |
| 9 | Mr.Ch.Vinay Kumar | Webinar | Superconductivity and its Applications | MGIT, Hyderabad | 04-07- 2020 |

FACULTY ACHIEVEMENTS

| 10 | Mr.G.Arun Kumar | Short Course | Learn to Design your own solar Home System | Energy Swaraj Foundation | 01-08- 2020 |
|----|-----------------------|-----------------------------------|---|--|-------------------------------------|
| 11 | Mrs.S.Sudha Rani | STTP | Mitigation of power quality issues in distributed generation systems using custom power devices-I | R.M.D Engineering college, chennai | 20-07- 2020 to 25-07- 2020 |
| 12 | Mr. C. Mahesh | Faculty Development Program | Controller Hardware-in-the- Loop Simulation Tool: for Future Electrical Engineers. | MGIT, Hyderabad in collaboration with Quarbz Info Systems, Kanpur | 24-07- 2020 |
| 13 | Mr. P.Ranjith Krishna | Online Course | The Digitized Grid | IEEE continuing education program | 29-07- 2020 |
| 14 | Ms. A. Tejaswi | Webinar | Recent Trends in Power Management strategies for optimal operation of Distributed energy resources in Micro grids | MGIT | 28-07- 2020 |
| 15 | Ms. Swati Paliwal | Energy Literacy course | Learn to design your own Solar home system | Energy swaraj Foundation | 05-08- 2020 |
| 16 | Mr. D. Vamshy | FDP | Controller Hardware-in-the- Loop Simulation Tool: for Future Electrical Engineers | MGIT, Hyderabad | 24-07- 2020 |
| 17 | Mr. N. Santhosh Singh | FDP | Controller Hardware-in-the- Loop Simulation Tool: for Future Electrical Engineers | MGIT, Hyderabad | 24-07- 2020 |
| 18 | Mr. K. Bharath Kumar | Webinar | Magnetic Levitation and High Speed Trains | MGIT, Hyderabad | 01-07- 2020 |
| 19 | Mr.H.Gurunath | Webinar | Recent trends in Power Management Strategies for Optimal Operation of Distributed Energy Resources in Microgrids | MGIT, Hyderabad | 28-07- 2020 |

