



The greatest technology  
is the one that  
changes our lives." –

**Develop Electronics and Communication Engineering Professionals  
competent to face the global challenges in a progressive environment  
Conducive to learn technical knowledge, skills blended with ethics and value  
to serve the society and to better it for a happy and comfortable living**



## MISSION OF THE DEPARTMENT

- \*To provide a competitive learning environment, through a need-based curriculum designed in collaboration with industry, conducive for high quality education emphasising on transfer of knowledge and skill development essential for the profession and the society as well.
- \*To nurture higher order leadership qualities and ethics and values in students to enable them to be leaders in their chosen professions while maintaining the highest level of ethics.
- \*To encourage the spirit of inquisition to promote innovation and entrepreneurship strengthened with life skills to sustain the stress.
- \*To foster effective interactions and networking with all the stake holders so as to work towards the growth and sustainability of the society and environment.

# PCB DESIGN

## FIRST-YEAR ECE STUDENTS GET PRACTICAL PCB WORKSHOP AT MBTS POLYTECHNIC

11-12-2025/12-12-2025



The recent PCB workshop at MBTS Government Polytechnic, Nallapadu took place on 11th December and 12th December. It was a valuable hands-on session for first-year ECE students, introducing Printed Circuit Boards – the foundation of all electronic devices – and moving beyond theory and breadboards to real design and building.

Students learned component identification (resistors, capacitors, diodes, ICs), schematic drawing using tools like KiCad or EasyEDA, PCB layout with proper track routing and design rules, basic fabrication steps (etching, drilling, soldering mask), hands-on soldering of simple circuits (like LED blinker or 555 timer projects), and testing with multimeters.



Finally, testing and debugging rounded off the experience. Using a multimeter, participants checked continuity, verified connections, measured voltages, and powered up their circuits to see them work live. The moment a self-soldered board lights up LEDs or produces sound is incredibly satisfying and motivates students to explore further.





# 28TH INTER POLYTECHNIC SPORTS AND GAMES MEET

22-12-2025 to 23-12-2025



The Inter Polytechnic Sports and Games Meet (IPSGM) program took place at MBTS (MBTS Government Polytechnic, Guntur, or associated venue). The inauguration ceremony was held on 22nd December and was graced by Chief Guest Burla Ramanjaneyulu, the Honorable MLA of Prathipadu Assembly Constituency (Guntur District) and a retired IAS officer (former District Collector of Guntur). The event was formally inaugurated by his esteemed hands, adding great honor and inspiration to the occasi



Mbts principal Mr.Rajashekhar contributed as regional coordinator of IPSGM

District-Level IPSGM Successfully Held at MBTS Government Polytechnic Guntur, December 23, 2025: The Inter Polytechnic Sports and Games Meet (IPSGM) was grandly conducted on December 22 and 23 at MBTS Government Polytechnic, located in Nallapadu Mandal. Organized under the aegis of the Department of Technical Education, Andhra Pradesh, this district-level event coordinator is Mr.T. Raghava rao from Electronics and Communication Engineering (ECE) Department. Students from various polytechnic colleges across Guntur district actively participated

MBTS students showcased exceptional skill, teamwork, dedication, and sportsmanship,

securing the highest points tally across multiple disciplines to lift the overall championship trophy. Their outstanding performances in events like running races, jumps, throws, volleyball, kabaddi, badminton, and more helped them edge out strong contenders from other institutions.

26<sup>TH</sup> REPUBLIC DAY  
JANUARY



77<sup>TH</sup>



## 77<sup>TH</sup> REPUBLIC DAY CELEBRATIONS AT MBTS GOVERNMENT POLYTECHNIC



### ECE HOD Madam's Address on Republic Day at MBTS:

"Dear students,

A warm and happy Republic Day to all of you! Today, as we proudly celebrate the 77th Republic Day at MBTS Government Polytechnic, Nallapadu, we remember the historic moment when our Constitution came into effect on January 26, 1950 – giving India its identity as a sovereign, socialist, secular, democratic republic committed to justice, liberty, equality, and fraternity.

In the joyful atmosphere of today's celebrations – with the flag hoisting, energetic performances, and collective patriotism – let us reflect on what this day truly means for us as young Indians and future engineers



# 77<sup>TH</sup> REPUBLIC DAY

## CERTIFICATE OF APPRECIATION FOR BEST EMPLOYEES



**Mr. T. Raghava Rao, L/E.C.E,  
Faculty, Department of Electronics &  
Communication Engineering  
for his exceptional dedication,  
outstanding teaching performance,  
sincere efforts, and inspiring guidance  
to students throughout the academic  
year.**

**Your tireless commitment to academic  
excellence, discipline, and student  
welfare has made a remarkable  
difference in the lives of many young  
minds.**

**On the occasion of the 77th Republic  
Day, we congratulate you on your  
continued outstanding contribution to  
the institution and wish you many  
more years of success and happiness.**



## MBTS College Republic Day event involving an NCC ECE student:

### Republic Day Celebrations Held with Pride at MBTS College

MBTS College celebrated the 77th Republic Day with great enthusiasm and patriotic spirit on the college campus. The event was organized grandly with the active participation of students, faculty, and NCC cadets.

The celebrations began with the hoisting of the National Flag by the Principal, followed by the National Anthem. NCC cadets performed an impressive parade that attracted everyone's attention. Among the participants, an ECE department student representing the NCC unit showed outstanding discipline and dedication during the march past and ceremonial activities.



Cultural programs, patriotic songs, and speeches highlighting the importance of the Constitution and national unity were conducted. The speakers encouraged students to serve the nation with responsibility and integrity. The program concluded with a vote of thanks and distribution of sweets. The entire event created a strong sense of patriotism and unity among the students and staff.



# DRONE TECHNOLOGY WORKSHOP 20-02-2026

The Department of Electronics and Communication Engineering (ECE) successfully conducted a two-day Drone Technology Workshop, beginning at sharp 10:00 AM. The session started with an awareness video about drone technology, which was displayed on the projector to give students an introduction to the concept and applications of drones.



At 11:00 AM, the program was formally launched by our beloved Principal, **Dr. P. Raja Sekhara Rao**, in the presence of the Guest of Honour, **Dr. G. V. Suresh (HCES)**. The event was supported by our respected faculty members **G. Lakshmi Narayana Sir**, **T. Raghava Rao Sir**, and our Head of the Department, **P. Anuradha Madam**, whose encouragement and guidance made the program successful.

The technical session was conducted by **Mr. Sekhar Sir** from Hindustan Airspace Company. From 11:30 AM to 12:00 PM, he explained what drones are, their purposes, applications, and future job opportunities in the drone industry.



From 12:00 PM to 1:00 PM, he detailed the various components required to build a drone and explained the function of each part to the students. Later, around 2:00 PM, he continued explaining the main drone parts and their characteristics in a very friendly and interactive manner, ensuring that all students understood the concepts clearly.

The ECE Department also provided snacks for the participants and extended full support throughout the event. This informative and engaging workshop is being conducted over two days, offering students valuable knowledge and practical insights into drone technology.

The workshop was highly beneficial and inspired students to explore career opportunities in the growing field of drone technology.



ECE Students Actively Participate in Drone Workshop – Hands-on Learning & Interactive Validation Session The Department of Electronics and Communication Engineering (ECE) successfully organized an informative and practical Drone Workshop for students, which concluded with an engaging validation session. During the workshop, ECE students actively explored the fundamentals of drone technology through hands-on learning and live demonstrations.

**As part of the session, students keenly identified various drone components such as motors, propellers (9×4.5), electronic speed controllers (ESC), flight controller, battery, and frame structure. The trainer explained the function and working principle of each component, helping students visualize how a drone system operates in real time.**

**The workshop provided an excellent platform for visualization-based learning, where students observed the drone assembly, calibration, and flight demonstration. This practical exposure helped them connect theoretical concepts of electronics, aerodynamics, and communication systems with real-world applications.**

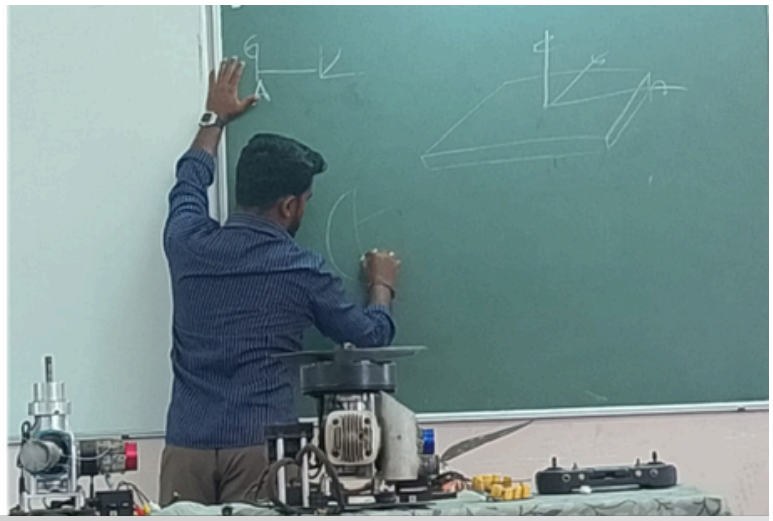
**ECE students showed great enthusiasm by actively interacting with the trainer and asking insightful technical questions regarding drone stability, motor selection,**

**payload capacity, flight control mechanisms, and propeller specifications. Their curiosity and participation reflected a strong interest in emerging technologies like UAVs and robotics.**

**The validation program at the end of the workshop highlighted the knowledge gained by students, as they confidently explained drone components and their applications in areas such as surveillance, agriculture, aerial photography, and disaster management.**

**Overall, the drone workshop was a valuable learning experience that enhanced the practical skills, technical awareness, and innovative thinking of ECE students, making it a memorable and impactful academic activity conducted by the department.**





On the second day of the drone workshop, the trainer explained how to integrate and assemble the drone components step by step. The session mainly focused on the proper merging of different parts such as the flight controller, ESC, BLDC motors, propellers (9×4.5), Li-Po battery, and drone frame. The trainer first demonstrated the physical assembly of the frame and mounting of motors at each arm of the quadcopter. After that, the Electronic Speed Controllers (ESCs) were connected to the BLDC motors and properly wired to the flight controller. He clearly explained the importance of correct wiring, polarity, and secure connections to ensure safe operation of the drone. Further, the trainer showed how the flight controller acts as the brain of the drone by receiving signals from the transmitter and controlling motor speed accordingly. The power distribution from the battery to ESCs and other components was also explained in a practical manner. Students were guided on calibration, motor direction checking, and propeller fixing for stable flight performance. ECE students actively observed the integration process and visualized how individual components work together as a complete drone system. They also asked technical questions regarding wiring, synchronization of motors, and safety precautions during assembly.



On the second day of the drone workshop, every student enthusiastically participated in the drone flying session. The atmosphere was filled with excitement and curiosity as students got the opportunity to control and operate the drone in real time. It was a thrilling experience for everyone, especially for those flying a drone for the first time. Under the guidance of the trainer, students learned how to handle the controller, maintain balance, control altitude, and ensure safe landing. They also understood the importance of components like motors, propellers, flight controller, battery, and sensors during practical operation. This hands-on session not only boosted their confidence but also helped them connect theoretical knowledge with real-world applications. The practical exposure enhanced their understanding of aerodynamics, stability, and control systems, making the learning process more effective and memorable.

# CSR-ELECTRONICS

27-02-2026



Digital Electronics Kits were sponsored by the Efftronics Foundation from Mangalagiri through CSR (Corporate Social Responsibility) funds to the ECE Department of MBTS Government Polytechnic College.

On this occasion, the Principal of the college and the staff members of the Electronics and Communication Engineering (ECE) Department participated in the program. The kits were provided to support practical learning and to improve the technical skills of the students in digital electronics.

The management expressed gratitude to Efftronics Foundation for supporting the students and encouraging hands-on learning in the field of electronics. The event was conducted successfully with the presence of the Principal and ECE department faculty members.

# COMMUNITY OUTREACH PROGRAM AT NRI MEDICAL COLLEGE MAGALAGIRI

28-02-2026



Disha Bharat – Andhra Pradesh successfully conducted a Personality Development Program at NRI Medical College on 28th February 2026 from 9:30 AM to 3:30 PM.

187 students actively participated in the program.

Sessions included:

- \* Introduction - Dr. T. Karthikeya Sharma \*
- Yoga session - Mr.Sateesh
- \* Self-Awareness session - Ms. Sirisha
- \* Academic Excellence - Shri T. Sekhar
- \* Interactive Quiz - Mr. B. Satish
- \*volunteer - N.SARADA

The program focused on self-awareness, stress management, academic discipline, and cultural values, aligning with the vision:

“Know Yourself, Know Your Country, Know Your Culture.”

The event was highly interactive and impactful, receiving positive feedback from both students and faculty.

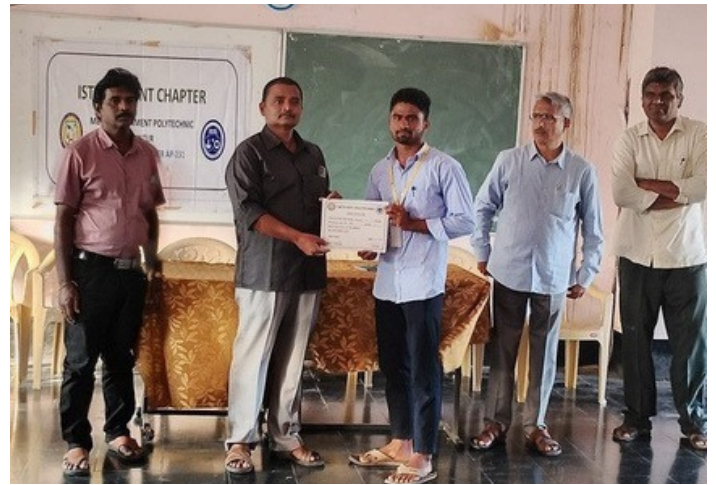
NRI medical college mangalagiri guntur 28/02/26

# ISTE CHAPTER ACTIVITIES

17-03-2026



Students of the Electronics and Communication Engineering (ECE) Department of M.B.T.S. Government Polytechnic, Guntur, actively participated in various programmes organized under the banner of the Indian Society for Technical Education (ISTE). The programmes included technical competitions, seminars, workshops, quizzes, and skill-development activities aimed at enhancing students' knowledge and professional competencies.



The participants showcased their talents, technical skills, and innovative ideas in different events. Through these programmes, students gained valuable exposure to emerging technologies, improved their communication and teamwork skills, and strengthened their practical understanding of engineering concepts.

Faculty members encouraged students to take part in such activities, emphasizing the importance of extracurricular and technical engagements in shaping successful careers. The active participation of ECE students brought recognition to the department and reflected their enthusiasm for learning beyond the classroom.

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