

A best practice is a method or technique that has been generally accepted as superior to any alternatives because it produces results that are superior to those achieved by other means or because it has become a standard way of doing things.

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## 1. Digitally Enabled Smart-Classroom Teaching

The advantages of a digitally-enabled smart classroom, there is an increase in the adoption of virtual learning tools. These are classrooms that utilize technology as a means of education, using electronic devices and the internet. Such classrooms support both real-time and recorded learning and help teachers create a flexible class schedule.

MMEC has installed and implemented **Twelve Digitally enabled Internet-connected Smart Class Rooms** from the Academic Year 2022-23 and also the recorded teaching videos will be shared to the students Email Ids.

#### Benefits of a digitally-enabled classroom

- 1. Global Information Sharing
- 2. Multiple Teaching Tools
- 3. Better Accessibility
- 4. Self-Paced Learning
- 5. Increased Accountability
- 6. Ease Of Communication



## 2. 3D and VR teaching

#### VIRTUAL REALITY

It's creation of Near – Reality Environment by Computer Technology. A computer generated Immersive, highly interactive; 3D computer generated multimedia environment in which user is a participant.

VR has recently been applied in several different areas, such as industrial simulations and cultural heritage documentation. It has also been widely applied in the field of medicine, automotive, and aerospace industries, as well as education and entertainment.



A new innovative teaching - learning method will be implemented for the students of Maratha Mandal Engineering college to have the feel of immersive environment. This boosts the confidence of students in better understanding the concept and enjoy new learning experiences.

Staff in the college are encouraged and motivated to adopt such new technologies in their teaching methods and make learning environment more meaningful and enjoyable.









## 3. Industry Visits

#### Industrial Visit to Hiranyakeshi Sahakari Sakkare Karkhane Niyamit, Sankeshwar

Department of Mechanical Engineering, Maratha Mandal Engineering College, Belagavi organized an Industrial Visit to Hiranyakeshi Sahakari Sakkare Karkhane Niyamit, Sankeshwar for students of Mechanical Engineering on 6<sup>th</sup>May 2022.Hiranyakeshi Sahakari Sakkare Karkhane is one largest sugar industry in north Karnataka. Industrial visit helped students to gain practical knowledge about various steps in sugar manufacturing process. It also helped them learn about power generation as byproduct from sugar industry. Principal Dr. D.G. Kulkarni and faculty members conveyed their happiness for conduction of industrial visit and expressed more of such industrial visits to be conducted to nurture Institute –Industry interactions and hence making the students industry ready.













#### **Industrial visit to GTTC Belagavi**

The Department of Electronics and Communication Engineering MMEC Belagavi organized one day Industrial Visit to "Government Tool Room and Training Center, Belagavi" on 10-05-2022 for final and Pre-final year students. The students were accompanied by Prof. Sandhya Bevoorand, Prof. Ashwini Dhamoji and guided by B.G. Moger, Principal GTTC and his technical team.

Students got exposure on various equipment's and devices related to Advanced Power Electronics and Communication labs. The demonstration was done on applications related to Robotics, Agricultural IOT, PLC Automation, SCADA,SAP, 3-D Printing. Students were able to gain knowledge on latest tools and technologies used for various applications in industries.

Principal, Maratha Mandal Engineering College, Dr. D .G. Kulkarni, conveyed his happiness and motivated us to organize such industrial visits in future for the benefit of students.









#### Principal and HOD's Visit to GTTC, Belagavi.

The principal Dr. D. G. Kulkarni and HOD's of Computer Science, Electronics & Communication and Mechanical Engg visited the GTTC center at Udyambag Belagavi. The objective of the visit was to see the infrastructure available at GTTC and have a collaborative agreement for exchange of expertise.









MMEC-IIC organized Industrial Visit to "K-Tech Incubation Center" for our MMEC students on 29<sup>th</sup> March, 2023, accompanied by Dr. Kiran Lakkam and Prof. Shubha Baravani









1st year Maratha Mandal Engineering student's Industry visit to Multi Tech Pvt. Ltd, Belagavi & Maruti Foundary Pvt.Ltd, Belagavi on Wednesday, 8th Feb.2023.

# Industrial Visit to GTTC, Belagavi





Industrial visit was organized for the students of Electronics, Robotics & AI and Mechanical on 12th Nov.22.

A session on Robotics, Automation CMM and much more.

## 4. Innovation and Frugal Engineering

The institute promotes innovation through various programs and multiple platforms are provided to the students to carry out their projects. The college has a fully functional Institutes Innovation Council (IIC), an IPR cell, an Entrepreneurship Development Cell and MOU with institutes like GTTC to use their infra-structure, all these are made available to the students to carry out their research and development.

#### Frugal Engineering Project 1: Drone making from old PC Fans and wooden frame

As part of the college's initiative in frugal engineering the students of Mechanical Engineering were able to develop a fully functional drone from waste computer fans and propellers







#### Frugal Engineering Project 2: Solar powered Scare crow for farmers

Another ingenious idea was converted into a frugal project by our students and staff of converting old solar panels and rusted bearings and motors into a scare crow. The idea was designed and fabricated at the college with promising results.



## 5. Product Centric Learning

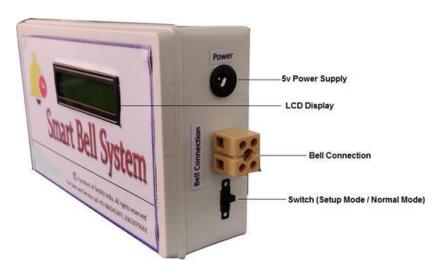
The institute tries to inculcate the habit among the students to convert their ideas into products, by providing them with necessary mentorship, training in required domains like Coding, Hardware & Embedded system, PCB designing, 3D modelling, sheet metal design, design analysis etc.

The students have worked on multiple ideas and were able to develop some products which has potential customers in the market

#### **Product 1: Automatic Bell Module**

#### **Features**

- a. Controls any 230V AC Bell (Even Other Appliances)
- b. Simple to use Android Interface to set timings
- c. Can set Time and Duration of the bell
- d. Ready to use kit with simple connection



## **Bell Module Usage**

- The Bell module runs on 5V DC power supply, make sure the power adaptor is 5v 1Amp.
- Use the Switch to put the module in Normal or Setup mode.
- Connect the 230v Bell to the Bell connection in Parallel as shown below

#### **Bell Connections**

The Bell connection directly gives a 230 v AC output, hence it is required to be careful. Any 230 volt appliance can be connected to it.

A 5v DC adaptor with a barrel jack can be connected to the socket to power up the Module.

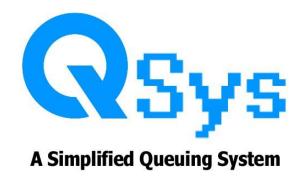


**Product 2: Mobile integrated Queuing System** 

#### **Features**

- Dispenses Queue tokens for clinics, hospitals, banks, hotels etc
- Mobile integrated Announcer Display

## **Token Dispensing Module**



Product Designed and Developed at NGH Labs, MMEC Campus

- Easy token configuration through mobile app
- Dispenses token to patients serially
- Easily integrates with any Android Mobile phone
- Easy to use Mobile App

#### **Product 3: Support system for physically challenged**

Prof. Swapneel Hugar faculty of Mechanical Engineering designed and developed multiple therapy integrated device that can function both as an assistive and rehabilitative device.

Cerebral palsy (CP) is a common term used to describe a group of chronic conditions affecting muscle coordination and cause disabilities mainly in the areas of body movement due to non-progressive lesion or injury to immature brain of a child. Cerebral palsy is the leading cause of developmental disability in children. The incidence of cerebral palsy is between 2 to 3 per 1000 live birth in India.

Cerebral means cerebrum which is a part of brain that affected. For the cerebral palsy case, the affected parts are cerebellum and cortex. Palsy is a term used to refer paralysis Cerebral palsy is a permanent disability; however the disability can be improved by proper treatments such as physical and occupational therapy.

Some cerebral palsy children cannot walk on their own They need an assistive or rehabilitative walking device to help them walk properly. There are several problem were identified in current walking devices available in market. First of all, they are not widely available and most of the walking devices for cerebral palsy are relatively expensive for an average income family with CP child. Another problem is walking devices are having single function. For an example, a walking assistive device only can assists a child to walk but it cannot be used as a rehabilitative device.

Children with cerebral palsy will face problems with movement coordination. There are many rehabilitative devices invented to help them. Rehabilitative devices are devices that can help a person function better and be more independent. The most suitable assistive device for this project is walking device or walker as well as wheelchair. This project is specifically for children with walking problem and also different the therapy can be carried out on this walker for these CP children such as **Standing Therapy**, **Sitting Therapy**, **Half Kneeling Therapy**, **Tall Kneeling** 

**Therapy**, and **Neck Holding** and also **Walking Therapy** can be carried by different mode of walker which can be activated as rehabilitative device.

Physiotherapy training such Standing Therapy, Sitting Therapy, Walking Therapy etc is the most common approach by almost all physiotherapy doctors.

Our project is completely base on the **Physiotherapy training programme** in which above mention rehabilitative exercise or therapy are carried to improve the movement of the body and can help to get effortless therapy for the (GMFCS) at first and second level of cp child.



#### 6. Conduction of CET Mock Test and distribution of CET Material

CET has always been a challenge to PUC 2ND YEAR students who are looking forward in cross roads over their future. Cracking the CET is very easy and possible if the student is fore armed with better knowledge of the pattern of the exam. Whatever be the level of preparations, a trial run will be of immense use. The CET material was prepared solely to benefit the student's community who are aspiring to become Engineers Keeping this in view, Maratha Mandal Engineering college has come forward to reduce the burden of students as well as the parents. The college has come up with CET materials in which there are more than 750 multiple choice question with answer PUC 1st year and PUC2nd year Physics, Chemistry and Mathematics that too topic wise and also Mock CET to the aspirants will be conducted on 2nd June to 10th June 2022 online. By browsing through Google link students can participate free in the above mock test and get evaluated themselves to test their knowledge.



## 7. Career guidance and Awareness about Engineering Program

Career Guidance is a counselling program designed to **help students choose the right career path based on their educational and professional choices**. It is a qualitative and quantitative assessment of the knowledge, skills, information, and experience to identify career options available. Career counselling helps them to analyze their strengths and weaknesses and helps in finding the perfect career path.

Our beloved Principal, Dr. D .G. Kulkarni spoke on "Career in Engineering and there way forward". He visited to all our sister concern institutes and had one to one interaction with all the students on Carrier opportunities in the Industry and how proper planning sets career up a strong foundation for our future and gives a steady path to focus on our goals. The students got motivated about how to go ahead after the completion of their graduation and choosing a perfect career path.







Our beloved Principal Dr. D. G. Kulkarni conducted an orientation session on "Placement Process and Resume Writing" for the final and prefinal year students. Sir underlined the importance of resume and how to crack the interview opportunity. He also highlighted the process followed during the placement interviews. The orientation session was filled with lucid real life examples which made the students realize the challenges involved during interviews and how to handle them.



Counseling for PUC II students of who will be taking the Pre-exams starting and "How to remember formulas" was demonstrated.



#### **Engineering on Campus:**

The students from various PUC colleges visit the campus and try hands on experience on machines of basic workshop, lathe, welding etc. This activity filled program makes the student aware about engineering field.















#### 8. In-house Placement Training

Training and Placement Cell in the Maratha Mandal Engineering College plays a vital role and is becoming a key department of the institute. As there are large numbers of Engineering and Management colleges coming up in India, the competition for employment is increasing every day and the job of placement is becoming a challenging one. A full pledged placement cell is functioning in our college with a full time placement officer.

Spearheaded by able professionals with guidance from the Principal Sir and Faculty members, Placement Cell works round the year and closely coordinates with recruiting teams from leading corporate houses to make sure that every student get suitable openings once they finish their courses.

#### Our Training and Placement Office is performing the following activities

- 1. Mock interviews
- 2. Group discussions
- 3. case studies
- 4. Quantitative Aptitude test
- 5. Classes on Programming Languages
- 6. Resume Building Program
- 7. Training to suit various needs of industry
- 8. Personality development
- 9. Interpersonal & communication skills
- 10. Career planning and career mapping
- 11. Program on Technology and Management















## 9. Hostel students Engagement

Maratha Mandal Engineering Belagavi has provided safe and congenial atmosphere to the college students. Our Hostel is within the college campus just opposite to engineering college. The living spaces are structured to inspire harmony. The facilities are very ideal for pursuing academic goal. It creates a homely atmosphere to the student, to relax and socialize and it is like home away from home.

Our Engineering College makes the best possible efforts to provide the best of services and facilities within the Hostel. The hostel life in Maratha Mandal Engineering College offers many entertaining activities like showing study oriented 3D movies, colorful event filled with cultural and sports activities. Programs are organized to encourage the hostel students in co-curricular activities includes sports and cultural events. From singing, dancing, fashion show to cricket, football, badminton, table tennis, chess, volleyball and fun filled activities like tug of war, dumb charades and many more. All these events and activities are for the merriment and relaxation of the students residing in hostels.









## 10. International Study tour and one international Language



## 11. National Anthem

To show gratitude and patriotism towards our nation the institute plays the National Anthem every working day at 10:15 a.m. on the central speaker system which is heard in the entire campus, in response everybody stands still where ever they are in respect and repeats the National Anthem.

This gesture not only inculcate sense of patriotism among the students but also help them develop sincerity and a culture.







12. Celebrating National and International Days (AICTE – VTU Notified)

# World Anti-Drug Day





On 26/06/2023 in view of World Anti-Drug Day awareness program was organized at Ukkad Village by the students and staff of Maratha Mandal Engineering college. More than 30 people participated in the program. The program was organized to create awareness on the growing menace of drug-addiction.

## **YOGA DAY CELEBRATION**







## **WOMEN'S DAY CELEBRATION**





International Women's Day celebrated on 8<sup>th</sup> March., 2023 at Maratha Mandal Engineering College. A true family bonding across various departments.

# NATIONAL SCIENCE DAY







MMEC-IIC celebrated National Science Day on 28<sup>th</sup> Feb 2023 with the theme Global Science for Global Wellbeing.

# CELEBRATION OF 74<sup>th</sup> REPUBLIC DAY



74th Republic Day was celebrated on 26<sup>th</sup> Jan., 2023 in MMEC campus. Shri. Modgekarji, Member, Managing Committee, Maratha Mandal hoisted the flag and paid tributes to Mahatma Gandhi.

## NATIONAL YOUTH DAY CELEBRATION.....2023





National Youth Day observed in MMEC on 13th Jan,2023. Tributes to Swami Vivekanandji a role model for all youth. Various events for youth writers flagged off.

# ೬೭ ನೆಯ ಕರ್ನಾಟಕ ರಾಜ್ಯೋತ್ಸವ



೬೭ ನೆಯ ಕರ್ನಾಟಕ ರಾಜ್ಯೋತ್ಸವ was celebrated at MMEC on 1<sup>st</sup> Nov., 2022.

# ಕೋಟಿ ಕಂಠ ಗೀತಾ ಗಾಯನ



ಕೋಟಿ ಕಂಠ ಗೀತಾ ಗಾಯನ

was organized at MMEC on 28<sup>th</sup> Oct., 2022 in view of 67<sup>th</sup> Karnataka Rajyotsava

# MAHARISHI VALMIKI JAYANTI



Maharishi Valmiki Jayanti was observed at MMEC on 9<sup>TH</sup> Oct., 2022.

## MAHATMA GANDHI / LAL BAHADDUR SHASTRI JAYANTI



Mahatma Gandhi Jayanti and Shri Lal Bahaddur Shastri Jayanti observed on 2<sup>nd</sup> Oct., 2022 at MMEC, followed by Swatchha Bharat Abhiyan at MMEC Campus.



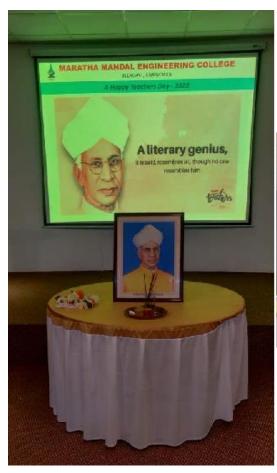
# **WORLD ENVIRONMENT HEALTH DAY '22**





World Environment Health Day observed at MMEC on 26th Sept., 22. Dr. Mahesh Sattigeri, a Physician spoke on the occasion how Environment balances our Health in routine

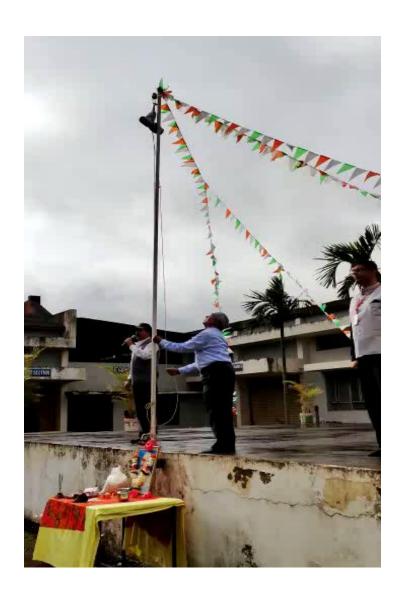
# TEACHER'S DAY '22

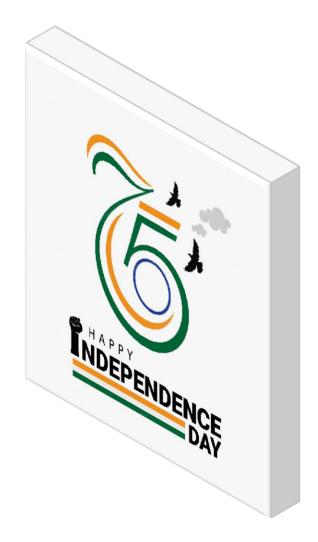




Teacher's Day Celebration at MMEC on 5<sup>th</sup> Sept., 2022.

# **INDEPENDENCE DAY**





Flag Hoisting Ceremony observed on the eve of 75<sup>th</sup> Independence Day 15<sup>th</sup> Aug., 2022

# LIBRARY DAY





Library Day was observed on 12<sup>th</sup> Aug., 2022

## 13. KLE Arogya Card for Non-Teaching Staff

