



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)
*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.

CIVIL

As per the annual plan the department of civil engineering would like to conduct 3 FDPs and 3 workshops for faculty and 3 workshops for Non-teaching staff.

During the annual year 2017-18, the department successfully completed one six days FDP and one orientation program to entire CMRCET 2018 faculty. Regarding workshops one program conducted for faculty.

Faculty from other engineering colleges around 100 plus took part in the programs and got benefitted. Also non-teaching faculty from CMRCET and other colleges about 45 plus got exposure to latest technologies in labs and test procedures during this period

For Non-teaching staff as planned we conducted three workshops.

Detailed reports summarized program wise and submitted.

Department of Civil Engineering

Report on Orientation Program held at CMRCET -2018-19

One Day workshop on "Autonomy in Higher education" was successfully conducted in the CMR college of Engineering and Technology, on 13th to 15th July 2017 by Department of Civil Engineering. The programme received on overwhelming response from the Faculty members.

Inaugural Session

The programme was inaugurated in the morning at auditorium on 13th July 2017 by hands of Dr V. Chandra Sekhar, Mrs. Haritha, Dr P. Ravi Kumar, Dr V. A. Narayana (Principal, CMRCET), Dr Lokeshwar Rao (Dean Academics, CMRCET), A.P. Ravi Chandra (Coordinator- FDP).

In welcome speech, Hon. Principal Major Dr. V. A. Narayana shared his views with the faculty participants that if faculty wants to develop themselves and their students, then attending such faculty development programmes would enhance their skills of teaching concepts practically. Sir further shared that it helps to improve the performance of faculty in teaching and highlighted the importance and objectives of organizing faculty development programmes. He briefed the participants about the subjects chosen for the FDP and highlighted the reasons and importance of the same.

In the inaugural speech, Hon. Dr. Lokeshwar Rao shared his views on faculty development. He further added that this programme will provide special benefits to faculty members.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)
*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.

Dr V. Chandra Sekhar started his discussion with very basic idea of concepts of education, learning and teaching. He shared few very important aspects to be considered while teaching-learning process. He highlighted the importance learning and gave idea about domains of learning i.e. cognitive, affective, psychomotor and interactive. He shared his technique like giving examples etc. It helped to make subject fully understand and created interest among the participant.

The following feedback was received from the participants:

The participants were of the opinion that this orientation program brought awareness on how to implement and solve the problems in bringing autonomy in Higher Education.

At the endvote of thanks by Ms. Ravali.

Report on Faculty development Programme

A six days Faculty development programme (FDP-2017)“Emerging Concepts In Civil Engineering Fields- EC2EF2017” was successfully conducted in the CMR college of Engineering and Technology, on 11th - 16th December, 2017 by Department of Civil Engineering. The FDP programme received on overwhelming response with participants.

Date wise brief Report for FDP programme is given below:

Date: 11th December 2017 (First Day)

Inaugural Session

The programme was inaugurated in the morning at auditorium on 11th December 2017 by hands of Dr D. Neelima Satyam, Dr Darga Kumar, Dr M. Venu, Ms Vijaya Gouri, Mr P. Ram Mohan Rao, Mr V. Gajendra, Dr V. A. Narayana (Principal, CMRCET), Dr. Lokeshwar Rao (Dean Academics, CMRCET), Joel Samuel (Coordinator- FDP).

In welcome speech, Hon. Principal Dr. V. A. Narayana shared his views with the faculty participants that if faculty wants to develop themselves and their students, then attending such faculty development programmes would enhance their skills of teaching concepts practically. Sir further shared that it helps to improve the performance of faculty in teaching and highlighted the importance and objectives of organizing faculty development programmes.

In the inaugural speech, Hon. Dr. Lokeshwar Rao shared his views on faculty development. He further added that this programme will provide special benefits to faculty members. The inauguration programme ended with vote of thanks by Ms. Snehitha.

In the second session, resource person **Dr D. Neelima Satyam** started her discussion with very basic idea of concepts of education, learning and teaching. She shared few very important aspects to be considered while teaching-learning process. She highlighted the importance of learning and gave idea about domains of learning i.e. cognitive, affective, psychomotor and interactive. She shared her



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)
*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.

technique like giving examples etc. It helped to make subject fully understand and created interest among the participant.

Date: 12th December 2017 (Second Day)

On the second day, Dr Darga Kumar started his discussion about how construction industry has been slow adopter of technology and in recent years the technology available to increase productivity and thus profit margins has been rapid adoption and advancement. Every faculty members gave good response to this discussion and raised their doubts in detail one by one.

Date: 13th December 2017 (Third Day)

On the third day, Dr M. Venu started his discussion about how the technology in the construction industry continues to advance educators in the awareness of "cutting edge" of technology in construction is, so they can expose their students to it, and more thoroughly prepare them for what they will interact with in their careers. After this discussion resource person examined them very well.

Date: 14th December 2017 (Fourth Day)

On the Fourth day, Mr P Ram Mohan Rao started his discussion about the construction industry has witnessed three distinct eras in information technology (IT). These eras started with stand-alone tools on a computer like computer aided drafting (CAD), next came a focus on communications, using email and related tools, currently we are in the 3rd era which is focused on interoperability and integration between the tools adopted in the previous eras. Every faculty members gave good response to this discussion.

Date: 15th December 2017 (Fifth Day)

On the Fifth day, Ms Vijaya Gouri started her discussion about the recent past emerging technology in the construction industry has focused on the communication and collaboration, as the benefits to the construction process by improvement in these areas. Two types of technology have dominated in these areas, building information modelling (BIM), which has established a solid reputation for collaboration and cloud computing, which has emerged more recently as a solution for collaboration.

Date: 16th December 2017 (Sixth Day)

On the Sixth day, Mr V. Gajendra started his discussion about as was the goal of the researchers, responses came from a broad cross section of construction industry professional whose responsibilities ranged from preconstruction and operations to administrative and executive. Data filtering was used to ensure only responses from construction or construction service providers were included in the analysis.

The following feedback was received from the participants:

Participants felt that the delivery and presentation of the resource person was good. Most of the participants were of the opinion that the FDP brought practical knowledge of the subject in them. Participants felt that such FDP was coordinated very well and should be arranged regularly.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)
*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.

Report of one week FDP

One week FDP on “GIS mapping & Remote sensing Applications” was successfully conducted in the CMR college of Engineering and Technology, on 18th – 23rd December-2017 by Department of Civil Engineering. The FDP programme received an overwhelming response with 27 participants.

Date wise brief Report for each of the three days FDP programme is given:

Date: 18th December 2017 (First Day)

Inaugural Session.

The programme was inaugurated in the morning at auditorium on 27th December 2017 by hands of Dr. V. Phani Kumar, Mrs. Pavani, Prof. P. Ram Mohan Rao, Dr. V. A. Narayana (Principal, CMRCET); Dr. Lokeshwar Rao (Dean Academics, CMRCET), A.P. Ravi Chandra (Coordinator- FDP).

In welcome speech, Hon. Principal Dr. V. A. Narayana shared his views with the faculty participants that if faculty wants to develop themselves and their students, then attending such workshop programmes would enhance their skills of teaching concepts practically. Sir further shared that it helps to improve the performance of faculty in teaching and highlighted the importance and objectives of organizing faculty development programmes. He briefed the participants about the subjects chosen for the WS and highlighted the reasons and importance of the same.

In the inaugural speech, Hon. Dr. Lokeshwar Rao shared his views on faculty development. He further added that this programme will provide special benefits to faculty members. The inauguration programme ended with vote of thanks by Ms. Rajitha.

In the second session, resource person Dr. V. Phani Kumar started his discussion with very basic idea of concepts of education, learning and teaching. He shared few very important aspects to be considered while teaching-learning process. He highlighted the importance of learning and gave idea about domains of learning i.e. cognitive, affective, psychomotor and interactive. He shared his technique like giving examples etc. It helped to make subject fully understand and created interest among the participant.

Date: 19th December 2017 (second day)

On the second day, Mrs. Pavani started her discussion on Geographic information system (GIS) and explained how it allows you to link databases and maps to create dynamic displays. Every faculty members gave good response to this discussion and raised their doubts in detail one by one. After this discussion resource person examined them very well.

Date: 20th December 2017 (third day)



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)

*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation

Kandlakoya (V), Medchal Road, Hyderabad -501401.

On the third day, Prof. P. Ram Mohan Rao highlighted the importance of remote sensing. He explained how to take measurements of the earth using sensors on airplanes or satellites. He discussed how it collects data in the form of images and provide specialized capabilities for manipulating, analysing, and visualizing those images.

Date: 21st December 2017 (day-4)

Mrs. Haritha, Assoc. Prof. MREC, started her lecture and gave few case studies regarding GIS. In the afternoon session study of GIS maps.

Date: 22nd December 2017 (day-5)

Dr. M. Venkateswarlu, CMRCET, HYD started his lecture and implementation of new techniques in civil engineering in watershed management.

Date: 23rd December 2017 (day-6)

Dr. J. Srinivasa Rao, CMR CET HYD, shared techniques used in civil engineering for finding out the Geological structures using GIS.

The program. In the afternoon session certificates distributed and vote of thanks by Ms. NVN Ravali, Assistant professor, CE department.

The following feedback was received from the participants:

Participants felt that the delivery and presentation of the resource person was good. Most of the participants were of the opinion that the WS brought practical knowledge of the subject in them. Participants felt that such WS was coordinated very well and should be arranged regularly.

Report of Workshop Programme for Non-Teaching Faculty

A three days' Workshop programme (WS-2018) "Skill Development in Civil Engineering Laboratory testing (SD CEL)" was successfully conducted in the CMR college of Engineering and Technology, on 2nd – 4th May 2018 by Department of Civil Engineering. The WS programme received an overwhelming response with 19 participants.

Brief report for each of the three days WS programme is given below:

Inaugural Session

The programme was inaugurated in the morning at auditorium on 2nd May 2018 by hands of Major Dr. V. A. Narayana (Principal, CMRCET), Dr. Lokeshwar Rao (Dean Academics) Dr K. Suresh, Mr Joel Samuel, Dr J Srinivas Rao, Dr. M. Venkateshwarlu, and Dr B. Prasad.

In welcome speech, Hon. Principal Major Dr. V. A. Narayana shared his views with the faculty participants that if faculty wants to develop themselves and their students, then attending such workshop programmes would enhance their skills of teaching concepts practically.

In the inaugural speech, Hon. Dr. Lokeshwar Rao shared his views on the WS. He further added that this programme will provide special benefits to participants.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)

*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.

In the next sessions, resource person started his discussion with very basic idea of concepts of education, learning and teaching. He shared few very important aspects to be considered while teaching-learning process. Sir further shared that it helps to improve the performance of faculty in teaching and highlighted the importance and objectives of organizing programmes. He briefed the participants about the subjects chosen for the WS and highlighted the reasons and importance of the same.

He highlighted the importance learning and gave idea about domains of learning i.e. cognitive, affective, psychomotor and interactive. He shared his technique like giving examples etc. It helped to make subject fully understand and created interest among the participant.

Later resource person started his discussion about the latest equipment's for material testing and he started discussion about how the latest equipment's are used for one to develop his/her career and clearly explained how we are increasing our knowledge through this latest equipment's. Every faculty members gave good response to this discussion and raised their doubts in detail one by one. After this discussion resource person examined them very well.

The following feedback was received from the participants:

Participants felt that the delivery and presentation of the resource person was good. Most of the participants were of the opinion that the WS brought practical knowledge of the subject in them. Participants felt that such WS was coordinated very well and should be arranged regularly.

Report on Workshop Programme (Non-Teaching Staff)

A three days' Workshop programme (WS-2018) "On Latest Equipment for Material testing" was successfully conducted in the CMR college of Engineering and Technology, on 20th – 22nd April 2018 by Department of Civil Engineering. The WS programme received an overwhelming response with 21 participants.

Date wise brief Report for each of the three days WS programme is given below:

Date: 20th April 2018 (First Day)

Inaugural Session

The programme was inaugurated in the morning at auditorium on 20th April 2018 by hands of Dr K. Suresh, Mr Joel Samuel, Mr. Ch. Rajendra Prasad, Dr M. B. Mouli, Dr N. K. Amudhavalli, Dr B. Prasad, Dr. V. A. Narayana (Principal, CMRCET), Dr. Lokeshwar Rao (Dean Academics, CMRCET).

In welcome speech, Hon. Principal Dr. V. A. Narayana shared his views with the faculty participants that if faculty wants to develop themselves and their students, then attending such workshop programmes would enhance their skills of teaching concepts practically.

In the inaugural speech, Hon. Dr. Lokeshwar Rao shared his views on the WS. He further added that this programme will provide special benefits to participants. The inauguration programme ended with vote of thanks by Ms. Ravali.

In the second session, resource person started his discussion with very basic idea of concepts of education, learning and teaching. He shared few very important aspects to be considered while teaching-



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)

*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation

Kandlakoya (V), Medchal Road, Hyderabad -501401.

learning process. He highlighted the importance learning and gave idea about domains of learning i.e. cognitive, affective, psychomotor and interactive. He shared his technique like giving examples etc. It helped to make subject fully understand and created interest among the participant.

Date: 21stApril 2018 (Second Day)

On the second day, resources person started his discussion about the test on bricks (Compressive strength test, Water Absorption test, Efflorescence test, Hardness test, Size, Shape and Colour test, Soundness test, Structure test) and test on cement (Fineness, Compressive strength, Consistency, Setting time, Soundness).

Date: 22ndApril 2018 (Third Day)

On the Third day, resource person started his discussion about the latest equipment's for material testing and he started discussion about how the latest equipment's are used for one to develop his/her career and clearly explained how we are increasing our knowledge through this latest equipment's. Every faculty members gave good response to this discussion and raised their doubts in detail one by one. After this discussion resource person examined them very well.

The following feedback was received from the participants:

Participants felt that the delivery and presentation of the resource person was good. Most of the participants were of the opinion that the WS brought practical knowledge of the subject in them. Participants felt that such WS was coordinated very well and should be arranged regularly.

Report on Workshop (Non-Teaching)

A three days programme on "Hands on Training to Operate Fire Extinguisher" was successfully conducted in the CMR college of Engineering and Technology, on 17th to 19th May, 2018 by Department of Civil Engineering. The programme conducted received on overwhelming response from participants.

Date wise brief Report for each of the three days programme is given below with the feedback at the end:

Date: 17thMay 2018 (First Day)

Inaugural Session

The programme was inaugurated in the morning at auditorium on 17th May 2018 by hands of Major. Dr. V. A. Narayana (Principal, CMRCET), Dr. Lokeshwar Rao (Dean Academics, CMRCET), Dr. K. Suresh (Civil HoD, CMRCET), Mr. A.P. Ravi Chandra (Coordinator- FDP).

In welcome speech, Hon. Principal Dr. V. A. Narayana shared his views with the faculty participants that if faculty wants to develop themselves and their students, then attending such programmes would enhance their skills of teaching concepts practically.

In the following session, resource person started his discussion with very basic idea of concepts of education, learning and teaching. He shared few very important aspects to be considered while teaching-learning process.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)
*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.

Date: 18thMay 2018 (Second Day)

On the second day, the discussion started about the responsibilities of everyone in the detection and prevention of fires. When appropriate, staff, students and faculty members should be trained in the proper and safe use of fire extinguishers. This course of instruction is not designed to turn participants into firefighters, but rather equip them with the knowledge and skills to detect and extinguish a fire only when it is safe to do so and explained the trainee will have a working knowledge of the Fire Triangle, Types of fires, Types of fire extinguishers, Fire extinguisher features, Fire extinguisher operation, Fire extinguisher Maintenance. Every faculty members gave good response to this discussion and raised their doubts in detail one by one.

Date: 19thMay 2018 (Third Day)

On the Third day, discussion about the types of fires (Class-A fires, Class-B fires, Class-C fires, Class-D fires,) and types of fire extinguishers (Water Extinguishers, Carbon Dioxide Extinguishers, Dry Chemical Extinguishers, Dry Powder Extinguishers). Every faculty members gave good response to this discussion and raised their doubts in detail one by one. After this discussion resource person examined them very well.

The following feedback was received from the participants:

Participants felt that the delivery and presentation of the resource person was good. Most of the participants were of the opinion that the WS brought practical knowledge of the subject in them. Participants felt that such WS was coordinated very well and should be arranged regularly.

**EEE
(2017-18)**

**A Report on
One week FDP on "Energy Management in Electrical Engineering"
21-08-2017 to 26-08-2017**

Energy management is the means to controlling and reducing a building's energy consumption, which enables: Reduce costs – energy represents 25% of all operating costs in an office building. Reduce carbon emissions in order to meet internal sustainability goals and regulatory requirements. Energy management is the best solution for direct and immediate reduction of energy consumption. For the last few decades we have been exploring various alternatives to conventional sources of energy like solar, wind and biomass energy. However, due attention must also be given to best utilization of energy, improvement in energy efficiencies and optimum management of energy resources. Infact, energy management deals with already existing sources and actual consumption. It includes planning and operation of energy-related production and consumption units.

The main objectives of energy management are resource conservation, climate protection and cost savings. The central task of energy management is to reduce costs for the provision of energy in buildings and facilities without compromising work processes.

The simplest way to introduce energy management is the effective use of energy to maximize profit by minimizing costs. Energy management could save up to 70% of the energy consumption in a typical building or plant.

Get Green Energy is an excellent platform for consumers to take action immediately and move the nation toward a net zero CO₂ future without requiring government intervention, new technology or additional infrastructure. Read more about it at [this link](#)

The typical energy saving for any plant or building, using basic energy management principles, could be 10-15% of the total consumption. This percentage may increase to 25-35% by a medium scale energy management program (1 – 3 year). For achieving higher degree of savings, a long-term energy management program, spread over a period of three years or more, is required which will involve a certain capital investment. The major elements of an energy management program are:

- Set your goal: how much energy reduction do you want to achieve
- Know your numbers: how much do you consume
- Define major consumption units and try to reduce consumption
- Continuous review and management

Energy Savings Tips for Industries

- Avoid extra-load in peak time. It is way more costly.
- Turn off machines during shut downs, inspections, maintenance and when not in use.

- Regular and efficient maintenance of machines and motors prevents extra loads and saves 15 % of extra consumption and prevents break downs as well.
- Attend air and steam leakages. These leakages are extra load on boilers, compressors etc.
- Replacement of incandescent lamps with compact fluorescent lights (CFLs) or LEDs can save significant amount of energy.

• Our case study for energy management program was developed and implemented in textile industry which is second highest industrial energy consumer in Egypt. The program, involving minimum investment, was implemented over a period of one year and proved to be a major success. Direct energy savings were approximately one-fourth of the total consumption. More than one million Egyptian pounds were saved from direct costs, in addition to considerable indirect savings.

Energy management is the process of monitoring, controlling, and conserving energy in a building or an industry. Energy management is the key to saving energy in any organization/industry. Energy management is an important energy resource that can help meet future energy needs while the nation concurrently develops new and low-carbon energy sources

There were 37 faculty members participated in this event. All the participants from various institutions appreciated the course contents and delivery of lectures. This gave a good insight on the ways means to save energy. Participants from CMRCET formulated an idea to conduct energy audit of the buildings inside the campus.

**A Report on
One week FDP on "Power System Operation in De-Regulated
Environment"
18-09-2017 to 23-09-2017**

Electric power industry has been dominated by large utilities that have an overall authority over all activities in generation, transmission and distribution of power, referred to as vertically integrated utilities. During the nineties, many electric utilities and power network companies world-wide have been forced to change their ways of doing business, from vertically integrated mechanism to open market system. This kind of process is called as Deregulation or Restructuring. The electric power industry has been dominated by large utilities that had an overall authority over all activities in generation, transmission and distribution of power within its domain of operation. Such utilities have often been referred to as vertically integrated utilities. Such utilities served as the only electricity provider in the region. It is responsible about the planning and operation of the power system according to certain criteria and policies. The basic objective of the operator in such vertically integrated utilities would be to maintain reliable and uninterrupted services to the load. The reliability of the system is composed of two aspects; adequacy and security. System adequacy is defined as ability to supply the energy requirements of the system taking into account planned and unplanned outages of the electrical components. System security is defined as the ability to withstand sudden disturbances without causing major blackouts and interruptions. System security is made of steady state and dynamic security analysis. Transient stability and small signal stability studies are important tools for the assessment of system security.

The deregulated environment has presented the new entities by a variety of problems in the planning and operation. There is need to assess the impact of Independent Power Producers (IPP), Non-Utility Generators (NUG) and Distributed Generators (DG) on system operation and stability. These entities seek transmission access and in many cases cause

congestion and overloading of equipment. These in turn are primary causes of problems in system reliability and security.

Therefore there is a necessity to address the following issues in light of the deregulation of the power system: 1. Reliability criteria 2. On-line security assessment 3. Robust stability controls 4. Coordinated emergency controls 5. Real-time system monitoring and control 6. Wide-spread use of distributed generation. The restructuring of electricity industry from a highly centralized entity to a new model characterized by competition has impacted many aspects of power system stability. The dynamic performance of the system is a function of the joint characteristics of generation, transmission, control and protection, and loads. In a vertically integrated utility the decision process on generation, transmission, distribution and control additions was well structured and defined. The restructuring requires establishing new facilities and control and also requires administering the required ancillary services. The additions of new facilities will be based on most favorable economic conditions. However, there will be some aspects of dynamic characteristics requiring cooperation dictated by the effects on the overall system performance. The security of a power system is affected by the characteristics of the physical system such as integrated generation, transmission and distribution system and protection and control systems. It is also influenced by the business structures of owning and operating entities and the regulatory framework. In today's power system environment, systems are large complex covering vast areas of national/continental grids and they are highly nonlinear systems. There are many processes whose operations need to be coordinated and large of devices requiring coordinated and harmonious interplay. The challenges facing the deregulated system include complex modes of instability due to global problems and the different forms of instability: rotor angle, voltage, frequency. Moreover, there are many entities with diverse business interests. Also system expansion and operation are driven largely by economic drivers.

As per the Electricity Act 2003, the electricity utility has been unbundled and formulated three organizations: Genco (Generation company), TRANSCO (Transmission company and DISCOM (Distribution company. These three work in a competitive mode. PowerGrid plays a major role in planning of transmission system and maintaining above 400kV level.

There were 26 participants from various institutes, were happy about the course and expressed that now they know how the electricity system is working. Congestion management is another aspect to be considered.

A Report on
One week workshop on "DSPACE Applications"
19-02-2018 to 24-02-2018

Dspace is an open source repository software package typically used for creating open access repositories for scholarly and/or published digital content.

dSPACE provides the necessary hardware platform consisting of a processor and interfaces for sensors and actuators, plus the Simulink blocks needed to integrate the interfaces into the Simulink model (Real-Time Interface, RTI).

The multifarious improvements in computational and simulation tools have brought tremendous progress in the field of designing, testing and analyzing technologies. The technological aspects and the concept of modern real-time digital simulators play major role in real-time simulations. The real-time simulator functions in real time, thus it produces continuous output that realistically represents the conditions of a real system. Also, in a real-time simulator the user can test physical devices. Therefore, it is of great importance to understand the features and roles of the advanced simulator technologies. Also, User-friendly

system interface, easy application in system design and testing, and most importantly cost effectiveness are the most desire features for implying these simulator into a research. Therefore, in summary, significant features by considering the above-mentioned facts of some most popular, globally, and commercially available simulator technologies: Real Time Digital Simulators (RTDS), OPAL-RT, Network Torsion Machine Control (NETOMAC), dSPACE, Real-Time solution by MathWorks (xPC target, Real-Time Windows target).

Considering the present day advances in real-time simulations. dSpace finds applications in power system by providing auxiliary control to improve the dynamic performance.

There were 26 faculty member from various institutes attended the program. All the participants expressed satisfaction about the course introduction and felt that research problems can be formulated using dSspace.

A Report on
One week FDP on Applications of MATLAB in Electrical Engineering Research -A
Research Perspective
1204/12/2017 to 10/12/2017

MATLAB (matrix laboratory) is a multi-paradigm numerical computing environment and proprietary programming language developed by Math Works. MATLAB allows matrix manipulations, plotting of functions and data, implementation of algorithms, creation of user interfaces and interfacing with programs written in other languages, including C, C++, C#, Java, Fortran and Python.

Although MATLAB is intended primarily for numerical computing, an optional toolbox uses the MuPAD symbolic engine, allowing access to symbolic computing abilities. An additional package, Simulink, adds graphical multi-domain simulation and model-based design for dynamic and embedded systems.

The technical program will include state-of-the-art lectures, hands-on lab sessions, tool demonstrations and discussion/presentation sessions.

FDP HIGHLIGHTS

1. Computer aided monitoring & dispatching system, Key Drivers to Technological Changes in the Electricity Sector, Reasons why Deregulation is appealing, Transformation, Electricity Restructuring around the World, Capacity payments, Responsibilities and functions of ISO, Models of Indian Power Sectors, Trading in Power Pool, Structure with bilateral/multilateral Trades, California Deregulation Process, New Electricity Trading Arrangement (NETA) in UK, England & Wales Electricity Market

2. Introduction of Power system structure, Commercial reasons for restructuring, Indian power scenario, HVDC Transmission lines in India, Renewable energy resources, National Load Despatch Centre(NLDC), Regional Load Despatch Centre(RLDC), Smart microgrid system

3. Introduction of MATLAB, Basics of MATLAB, Toolboxes, Windows of MATLAB, Commonly used Commands in MATLAB, Special Functions, MATLAB as a Calculator, MATLAB Programming, MATLAB Graphics

4.Signal Analysis using MATLAB, Signals & Systems, Systems Behavior, Fourier Analysis of Signals, DIRICHLET'S conditions, Representation in Fourier Series, Fourier Spectra, GIBB'S Phenomenon

5.Applications of Artificial Intelligence Computational Techniques in Smart Grids, Distribution Generations Planning, Type of DGs, Mathematical Problem Formulations, Impact of DGs & FACTS Controllers, Methods for DGs Planning, Optimization methods, Future Scope of Research Work

6.Introduction to MATLAB, Components of MATLAB, Matrix Operations, Simulink, Simulink libraries, Application of simulation results in research paper writing, Electric Power Quality, Electrical Transient, Harmonics, Filters, Multilevel Power Converters, Modulation Techniques

7.Solar photo-voltaic system, Installed power status in India, JN National Solar mission, Issues related to solar cell efficiency, PV cell, Tracking methods, Issues in tracking methods, PSC and water flow analogy, Mismatch losses, Performance indices, Simulink model of a PV cell, Puzzle Pattern based Reconfigured PV Array

8.Introduction of ANN, Training of ANN, ANN parameters, Nature inspired global optimization methods, Levenberg-Marquardt (LM) Training Algorithm, Introduction to forecasting, Commonly used forecasting models, Classification of ELF models

9.Transient Simulations in Simulink, Construction of Simulink Models, Constructing the Closed-Loop Model, Buck Converter Subsystem, PWM Subsystem, A/D Converter Model, Discrete-time Integral Compensator, Digital PWM

10.Introduction to Power system, Evolution of Power Systems, Optimization techniques used in Power system, Power system stability, Traditional Power system, Deregulated Power system

11.Image Processing Using Matlab, MATLAB Basics, Launch Pad, Objects in MATLAB, Images and Matrices, Flow Control, Images in Matlab, Digital Image Representation, Pixel Notation, Image Processing Toolbox, Data Classes, Performance Issues, Histogram Equalization, Morphological Opening

12.MATLab Programming, M-files, MATLAB Script Files, Matlab editor, Conditional Statements, Switch-case Selection, Evolution of Power Systems, Power Flow, choice of Frequency, Nonlinear Function Optimization, Constrained Parameter Optimization

There were 27 faculty member from various institutes attended the program. All the participants expressed satisfaction about the course

**A Report on
One week FDP on “Simulink for System & Algorithm Modeling”
24-05-2018 to 02-06-2018**

This workshop aimed at providing practical methods for incorporating Simulink in the classroom to enhance teaching of technical concepts. Engineering education involves a fine balance between teaching theory and imparting practical problem solving skills. Educators are also challenged to provide real-world examples that enable students to appreciate how the theory being taught in class can be applied in industry. The use of Simulink models in class and throughout a course exposes students to a tool that is widely used in industry to design and model complex systems. At the same time, large-scale models can be used to illustrate how theoretical concepts relate to the bigger picture and how they can be applied to solve real-world problems. In this workshop, it was demonstrated how Data analytics, signal processing and control systems models can help to bridge the gap between theory and application, thus providing extra motivation for students. The speaker demonstrated how using interactive models in class can help to address the different learning styles of students, allowing them to learn more actively. A session was planned at the end to review resources that can help teachers incorporate MATLAB & Simulink throughout a course.

TOPICS DISCUSSED

- MATLAB and Simulink in Engineering Education
- Accessing, exploring, analyzing, and visualizing data in MATLAB
- Using the Classification Learner app and functions in the Statistics and Machine Learning Toolbox to perform
- Common machine learning tasks such as Feature selection and feature transformation
- Demo: ADAS using live camera stream
- Electrical engineering concepts Using MATLAB and Simulink
- System Identification & Neural Network Based System Modeling Techniques
- Electrical engineering using Simscape (Physical Modeling)
- Electrical engineering using SimPowersystems

There were 21 faculty member from our institute attended the program. All the participants expressed satisfaction about the course introduction and felt that research problems can be formulated.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)
*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.

MECHANICAL

Report of the Faculty Development Programmes For Academic Year 2017-18

“Product design using Autodesk Inventors”

Date:21/11/2017

The Faculty development programme on “Product design using Autodesk Inventors” held on 13-11-2017 to 18-11-2017. This Autodesk Inventor software, you can easily integrate AutoCAD and 3D data into a single digital model to create a virtual representation of the final product. Inventor software helps you realize the benefits of 3D product development by providing an associative connection to native DWG files so there’s no risk of inaccurate translations. Utilizing valuable DWG data with Inventor can help you compete more effectively, service your clients better, and make great products. Reduce errors and associated engineering change orders before manufacturing by generating manufacturing documentation directly from your validated 3D digital model.

It is a one week training programme and was scheduled from 9.10am to 4.00pm for one week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various methods for Product design using Autodesk Inventors.

“Composite materials and their applications”

Date:27/12/2017

The Faculty development programme on “Composite materials and their applications” held on 18-12-2017 to 23-12-2017. This Faculty Development Program is intended to bridge the gap between Research and Academics in Mechanical Engineering by comprehensively dealing the Composite materials and their applications. In this programme we discuss Emerging developments in Materials such as Metals, Super alloys, Ceramics and Composites, Current Trends in Manufacturing including quantitative treatment, Selection of materials using Performance Indices and Ashby charts, Theory of Inventive Problem solving (TRIZ), Quality Control and Designing of Quality ; Design of Experiments-Taguchi and RSM Techniques, Surface Engineering Material . Testing including Non Destructive Testing Techniques This Faculty Development Program will provide the opportunities to flourish the Knowledge for the participants.

It is a one week training programme and was scheduled from 9.10am to 4.00pm for one week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various methods for Composite materials and their applications.

“Digital Prototyping using Autodesk Inventor”

Date:18/01/2018

The Faculty development programme on “Digital Prototyping using Autodesk Inventor” held on 08-01-2018 to 12-01-2018. With Autodesk Inventor software, you can easily integrate AutoCAD and 3D data into a single digital model to create a virtual representation of the final product. Inventor software helps you realize the benefits of 3D product development by providing an associative connection to native DWG files so there’s no risk of inaccurate translations. Utilizing valuable DWG data with Inventor can help you compete more effectively, service your clients better, and make great products. Reduce errors and associated engineering change orders before manufacturing by generating manufacturing documentation directly from your validated 3D digital model. This Faculty Development Program will provide the opportunities to flourish the Knowledge for the participants.

It is a Five day training programme and was scheduled from 9.10am to 4.00pm for one week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points,



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)

**Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation*

Kandlakoya (V), Medchal Road, Hyderabad -501401.

which helped in traits. Overall the training Programme provided various methods for in the field of Design.

“Analysis of Composite materials using Ansys work bench”

Date:28/02/2018

The Faculty development programme on “Analysis of Composite materials using Ansys work bench” held on 19-02-2018 to 24-02-2018. The Faculty Development Program is intended to build from the big ideas in finite element analysis and computational fluid dynamics to ANSYS case studies that progress from real world applications and examples. ANSYS is the flagship engineering software solution that uses finite element analysis (FEA), which is a numerical and computational method used to solve the real engineering problems. To solve the problem, it subdivides a large problem into smaller, simpler parts that are called finite elements and solve the problem by minimizing an associated error function. This Faculty Development Program will provide the opportunities to flourish the Knowledge for the participants.

It is a one week training programme and was scheduled from 9.10am to 4.00pm for one week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various methods for Ansys work bench.

“Computer Aided Design and Analysis”

Date:21/06/2018

The Faculty development programme on “Computer Aided Design and Analysis” held on 04-06-2018 to 16-06-2018. The use of Autodesk Inventor software, you can easily integrate AutoCAD and 3D data into a single digital model to create a virtual representation of the final product. Inventor software helps you realize the benefits of 3D product development by providing an associative connection to native DWG files so there’s no risk of inaccurate translations. Utilizing valuable DWG data with Inventor can help you compete more effectively, service your clients better, and make great products. Reduce errors and associated engineering change orders before manufacturing by generating manufacturing documentation directly from your validated 3D digital model.

It is a Two-week training programme and was scheduled from 9.10am to 4.00pm for one week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various methods for Computer Aided Design and Analysis.

“Maintenance of Machine Tools and Applications”

Date:29/10/2018

The Training Programme on “Maintenance of Machine Tools and Applications” held on 23-10-2017 to 25-10-2017. The Training Programme is intended to improve the skills of the participants. The Training Program also deals with Theory of Inventive Problem Solving techniques as a tool for solving complicated problems of Engineering. This Training Program will provide the opportunities to flourish the Knowledge for the participants.

It is a Three Day Training Programme and was scheduled from 9.10am to 4.00pm for one week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various processes for Machine tools applications.

“ IC Engine Assembly and Dis Assembly Practices”

Date:25/04/2018

The Training Programme on “IC Engine Assembly and Dis Assembly Practices” held on 19-04-2018 to 21-04-2018. The Training Programme is intended to improve the skills of the participants. The Training Program also deals with Theory of Inventive Problem Solving techniques as a tool for solving



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)
*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.

complicated problems of Engineering. This Training Program will provide the opportunities to flourish the Knowledge for the participants.

It is a Three Day Training Programme and was scheduled from 9.10am to 4.00pm for one week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various processes for Engine Assembly.

“Outcome Based Education (OBE) and NBA accreditation process”

Date: 12/12/2017

The Faculty development programme on **“Outcome Based Education (OBE) and NBA accreditation process”** was held on 04-12-2017 to 08-12-2017. This Faculty Development Program was intended to make the participant understand the process of NBA accreditation process and let the audience expose to both program level and institution level criteria. The program included an emphasis on NBA SAR format, which entirely relied on objective based evaluation. Unlike other similar programs, this program reached the crest of NBA process.

It was a five-day training program and was scheduled from 9.10 AM to 4.00 PM for five days including lunch and tea snacks. The training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training program provided various methods for Outcome Based Education (OBE) and NBA accreditation process.

“Servicing, Maintenance and Use of Different Conducting, Semiconducting and, Insulating Materials Parts in Distinct Engineering Streams”

Date: 11/10/2017

The Training programme on **“Servicing, Maintenance and Use of Different Conducting, Semiconducting and, Insulating Materials Parts in Distinct Engineering Streams”** was held on 09-10-2014 to 11-10-2014. This Training Program comprehensively dispensed the mechanical and electrical properties of conducting, semiconducting, and insulating materials and parts made by them. It also dealt the role of different parts in distinct engineering fields made by these materials. This training program comprehensively dispensed the procedure for the servicing, maintenance and constructional detail of parts made by these materials. This training program was very helpful to enhance the job enrichment, technical knowledge of the employee, excellence in organizational work and, overall learning.

It is a Three Day training program and was scheduled from 9.10am to 4.00pm for one week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Program was very knowledgeable and helpful for everyone as the contents of program proved this.

We thanks to CMRCET for providing such an opportunity and we wish that we get such another opportunity in future to enhance excellence in organizational work and enhance overall learning.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)
*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.

ECE

The Department of ECE has conducted 6 Faculty Development Programmes and 3 Workshop programs and 2 Orientation Programs for the year 2017-2018. All the programs was conducted under the chairmanship of Principal Major Dr. V. A. Narayana and the convenership of Dr.B.Lokeswara Rao.

A Two Week Faculty Development Programme on **Security systems through IOT** was held during the period of 4th to 13th June 2018, for which the allotted budget was Rs. 75000 /-. The coordinator for this FDP is Dr Gopala Krishnan, N.BhagyaLaxmi, Asst.Professor, ECE Department Dr.Shanidul Hoque, Sr.Asst.Professor,MITS Madhanapalle , was the main resource persons and the total no. Of participants are 32.

A Two Week Faculty Development Programme on **Signals& Transform techniques and their Application** was held during the period of 21st to 30th May 2018, for which the allotted budget was Rs. 40000 /-. The coordinator for this FDP is Dr. Anil Kumar, Professor of ECE Department Faculty of NIT Warangal and some reputed organizations were the main resource persons and the total no. Of participants are 43.

A One Week Faculty Development Programme on **Advances in wireless communications** was held during the period of 11th to 15th December 2017 for which the allotted budget was Rs. 91477/-. The coordinator for this FDP is Dr. Anil Kumar, Professor of ECE Department Faculty of NIT Warangal and some reputed organizations were the main resource persons and the total no. Of participants are 64.

A One Week Faculty Development Programme on **Hands on Experience on LABVIEW modules MDAC MRIO** was held during the period of 27th to 2nd December 2017, for which the allotted budget was Rs. 30000/-. The coordinators for this FDP Dr. Vandana khare, Professor and Mrs.S.KrishnaVeni, Asst Professor of ECE Department. Dr.Ritwik Halder, Asst.Professor, VELTECH CHENNAI was the main resource persons and the total no. Of participants are 33

A One Week Faculty Development Programme on **Optimization Techniques in Antenna Design** was held during the period of 7th to 12th August 2017 for which the allotted budget was Rs. 25000/-. The coordinator for this FDP is Dr. Vandana Khare, Professor & Mrs. B.Premalatha; Assoc. Prof. of ECE Department. Dr.Rupam Goswami,Asst.Professor, BITS Pilani was the main resource persons and the total no. Of participants are 36.



A One Week Faculty Development Programme on **Recent trends in Digital system design** was held during the period of 3rd to 8th July 2017 for which the allotted budget was Rs. 28000/-. The coordinator for this FDP is Dr Gopala Krishnan, Professor & Mrs. Ch.Neelima, Asst. Prof. of ECE Department. Dr.G.V.Hari Prasad, Professor ECE Department, MISW, Khammam, Prof. Mr.V.SrinivasaRao, Assoc.Professor,ECE was the main resource persons and the total no. Of participants are 32.

Three day workshop on **Applications of 8051 and 8086** was held during the period of 3rd to 5th May 2018 for which the allotted budget was Rs. 5000/-. The coordinator for this FDP is Mr. C. Veeranjanyulu, Asst.Professor ECE Department. Mr. C. Veeranjanyulu, Asst.Professor ECE Department was the main resource persons and the total no. Of participants are 23.

Three day workshop on **CS studio Hands on Experience** was held during the period of 4th to 8th December 2017 for which the allotted budget was Rs. 8000/-. The coordinator for this FDP is Mr. Anil



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)

***Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.**

Santi, Asst.Professor ECE Department. Mr. Anil Santi, Asst.Professor ECE Department was the main resource persons and the total no. of participants are 22.

Five day workshop on **Hands on Digital Design using Arduino Board** was held during the period of 5th to 9th July 2017 for which the allotted budget was Rs. 8000/-. The coordinator for this FDP is **Mr.Abdul Subhani Shaik, Asst.Professor of ECE Department.** Mr.Abdul Subhani Shaik

Asst.Professor ECE Department was the main resource persons and the total no. of participants are 22.

One Day Orientation Program on **Microsoft Office** was held on 5th February 2018, the allocated budget was Rs.6000/- & One-day Orientation program on **"NIRF Guidelines"** was held on 14th July 2017, the allocated budget was Rs.6000/-.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)

*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation

Kandlakoya (V), Medchal Road, Hyderabad -501401.

CSE

The Department of CSE has conducted 8 Faculty Development Programmes and 2 training programs for the year 2017-2018. All the programs were conducted under the chairmanship of Principal Major Dr. V. A. Narayana and the convener ship of Dr.K.Vijaya Kumar.

One week faculty development Programme on Personality development was held during the period of 3rd to 7th December 2017, for which the allotted budget was Rs. 15000/-. The coordinators for this FDP is Ms A.Poongodai, Associate Professor Department of CSE, is Ms. T Sridevi , Hyd.was the main resource person and the total no. of participants are 50.

Two week faculty development Programme on Web Development (Java full stack) was held during the period of 14th to 26th May 2018, for which the allotted budget was Rs. 18000/-. The coordinator for this FDP is Mr.S.Gandendar Reddy, Assistant Professor, Department of CSE Ms. Sharada vulagam, Virtusa. was the main resource person and the total no. of participant is 40.

One week faculty development Programme on IOT & Android Programming was held during the period of 21st to 25th May, 2018, for which the allotted budget was Rs. 15,000/-.The coordinators for this FDP are Mrs.P. Sruthi Associate Professor, Dept of CSE. Dr. B. Srinivas, Professor, Ambedkar University was the main resource persons and the total no. of participants are 40.

One week faculty development Programme on Artificial Intelligence using Machine Learning & Deep learning was held during the period of 21st to 25th May 2018, for which the allotted budget was Rs. 26000/-. The coordinators for this FDP are Dr. M. Dilshad Ansari, Associate Professor, CSE Department, Mr. Chandan Kumar Varma, Assistant Professor, IITK. was the main resource person and the total no. of participants are 40.

One week faculty development Programme on "Data Science & Big data Analytics". was held during the period of 30th April to 4th May 2018, for which the allotted budget was Rs. 15000/-. The coordinator for this FDP is Mr. K. Venkaeswara Rao Professor of CSE Dept. Dr. K Anvesh, Professor, GRIET, Hyd. was the main resource persons and the total no. of participants are 40.

One week faculty development Programme on Role Of Teachers in Changing Times, Mentoring and Nurturing was held during the period of 17th to 21th April, 2018.The coordinators for this FDP is B. Shiviah, Associate Professor of CSE Dept. Dr. Sukhbir Singh Ahluwalia , I.K Gujral Punjab Technical University Jalandhar. was the main resource persons and the total no. Of participants are 50.

One week faculty development Programme on Hebeon tool was held during the period of 16th to 18th November, 2017, for which the allotted budget was Rs. 25000/-. The coordinator for this FDP is S. Gandendar Reddy, Assistant Professor, Department of CSE. Mr . B Naveen kumar. Corporate Trainer, Hebeon Technologies, Hyd was the main resource persons and the total no. Of participants are 36.

One week FDP on Virtualization was held during the period of 3th to 7th July 2017.The coordinator for this FDP is Dr. K.L.S Soujanya, Professor Department of CSE. Mr. M. P. Jagadeesan Corporate Trainer, Hebeon Technologies, Hyd. was the main resource persons and the total no. Of participants are 40.

One week workshop on MS office was held during the period of 6th to 10th May 2019.The coordinator and resource person for this workshop is Mr.sivaskanda, Assistant Professor, Department of CSE. The total no. Of participants are 30.

One week Workshop on C language was held during the period of 1st to 5th July 2019.The resource person for this workshop is Mr. Sambasiva Rao, Technical Trainer, Kosmik Technologies Pvt. Ltd,Hyd. The total no. of participants are 35.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)

*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation

Kandlakoya (V), Medchal Road, Hyderabad -501401.

H&S

The Department of H&S has conducted 4 Faculty Development Programs for the year 2018-2019. All the programs were conducted under the chairmanship of Principal Major Dr. V. A. Narayana and the convenorship of Dr. Chandra Shekar Reddy

A one week faculty development Program on Human Values was held during the period of 10th to 14th July 2017, for which the allotted budget was Rs. 55,000/-. The coordinators for this FDP are Dr. Chandra Shekar Reddy, HOD H&S, Ms. Fathima Mary, Professor. Prof M. Rajeswar the main resource person and the total no. of participants are 9.

A one week faculty development Program on Recent Advances in Nano Technology in chemistry was held during the period of 24th to 28th July 2017, for which the allotted budget was Rs. 55,000/-. The coordinators for this FDP are Dr. Chandra Shekar Reddy, HOD H&S, Dr. Rama Mohan, Professor. Dr. P. Ashok Kumar the main resource person and the total no. of participants are 25.

A one week faculty development Program on Recent Advances in Nanotechnology was held during the period of 18th to 22nd December 2017, for which the allotted budget was Rs. 68,000/-. The coordinators for this FDP are Dr. Chandra Shekar Reddy, HOD H&S, and Ms Soma Mukhopadyay Professor of Physics department., and the total no. of participants are 10.

A one week faculty development Program on Recent Trends in Pure and applied Mathematical Science was held during the period of 4th to 8th December, 2017, for which the allotted budget was Rs 52,000/-. The coordinators for this FDP are Dr.Chandra Shekar Reddy, HOD H&S Dr. Vijay prasad .Dr.Ravindra Reddy was the main resource persons and the total no. Of participants are 19 .



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)
*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation
Kandlakoya (V), Medchal Road, Hyderabad -501401.

MBA

List of Programmes organized in the MBA Department in the Academic year 2017-18:

1. FDP on "A Road map to write Research article": publish or perish
2. FDP on "Concepts and Challenges of IFRS Vs GAAP in Indian Scenerio"
3. FDP on "E-content Development & Learning Management System"
4. FDP on "Importance of software packages for GST with special emphasis on Tally Software"
5. FDP on Digital Marketing

FDP on "A Road map to write Research article": publish or perish : 04-07-2017 to 08-07-2017

About FDP:

This Faculty Development Program focuses on a researchers, who can attain recognition through publishing research papers in reputed journals. However, the path to publication is not easy. Publishing in any impact factor journals requires author to do original research, write as per journal standards and patience. A lot of researchers have novelty in their topic but still are unable to get themselves published.

The Objective of the FDP is to provide an analysis on:

- Right from topic selection to selection of base papers
- Developing problem statement
- Advanced data analysis using SPSS, AMOS, Stata or E-Views
- Writing the manuscript as per journal requirements
- Draft of the Manuscript and Final Review

FDP on "Concepts and Challenges of IFRS Vs GAAP in Indian Scenerio": 01-08-2017 to 05-08-2017

About FDP:

This FDP aim of forming one uniform accounting standard, a London based board known as the International Accounting Standards Board (IASB) issued International Financial Reporting Standards (IFRS). They are principle-based standards that outline the broad rules and regulations for financial reporting. Currently, our global economy is extremely integrated. Companies raise capital from across the globe. They also market and sell their products in various countries. This results in them having tax liabilities in various countries as well. And so this has lead to a demand for a global standard for accounting. The ultimate goal of the IFRS is to provide a common global language for global business via standardized accounting. So if a company has dealings in several countries it only publishes one set of financial statements that fulfill the statutory requirements of all the countries it operates in. Also if there is a global standard then it becomes much easier for users of these financial statements to compare them. Broadly the IFRS consist of the following: 13 IFRS 28 International Accounting Standards (which were issued before the IFRS) 15 Interpretations of the IFRIC 9 Interpretations of the Standard Interpretation Committee (SIC).

FDP on "E-content Development & Learning Management System": 16-10-2017 to 20-10-2017

About FDP:

The Faculty Development Programme will be a training-cum-production type one in workshop mode, involving lecture-cum-demonstrations, interactive sessions and hands-on practice. It has been planned in such a way that every participant will carry home his / her e-content as an outcome of the Faculty Development Programme. Further, funding opportunities through proposals will also be exposed.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)

*Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation

Kandlakoya (V), Medchal Road, Hyderabad -501401.

Since the timings of the Faculty Development Programme will extend well beyond the office hours, it has been planned as a residential one. As the programme involves some independent/guided work with the computers, it is suggested that each participant brings a laptop and mobile internet device. However, the Computer Lab facility will also be provided for doing the multimedia work. Understand the need and significance of E-Content in the context of Digital Learning Initiative in India, develop deeper insights into the dynamics of E-content creation and produce an e-Module on some concept in their discipline.

FDP on "Importance of software packages for GST with special emphasis on Tally Software": 26-12-2017 to 30-12-2017

About FDP:

The Faculty Development Programme will be training on the concepts of software packages for GST with special emphasis on Tally Software. GST is an Indirect Tax which has replaced many Indirect Taxes in India. The Goods and Service Tax Act was passed in the Parliament on 29th March 2017. The Act came into effect on 1st July 2017; Goods & Services Tax Law in India is a comprehensive, multi-stage, destination-based tax that is levied on every value addition. In simple words, Goods and Service Tax (GST) is an indirect tax levied on the supply of goods and services. This law has replaced many indirect tax laws that previously existed in India. here are currently three types of GST
CGST – Central GST – Applies to sales within the state – goes to Central Government
SGST – State GST – Applies to sales within the state – goes to State Government
IGST – Integrated GST – Applies to sales outside the state – goes to Central Government For example, if you sell something within the state, 50% of the GST will be CGST and 50% of the GST will be SGST. But when you sell something outside a state, 100% of it will be IGST which will go to the Central Government

FDP on Digital Marketing: 15-01-2018 to 19-01-2018

About FDP:

The Faculty Development Programme will be focused on the areas of core concepts of Digital Marketing. Digital marketing is an exciting area of marketing practice. In this course, specific topics on Digital Marketing will be covered. First, establish habits for keeping up to date on emerging digital technologies relevant to business and to marketing. Second, rise to the challenge of developing strategy to guide tactics. Third, identify data sources that allow you to define and track performance indicators for your digital marketing activities. The course is designed to get the student to think like a digital marketing professional, and to give experience with industry-relevant hands-on assignments and exercises. Learn the dynamics and latest trends in digital marketing. Learn to develop a comprehensive digital marketing strategy and its application. Learn through doing how to use new media such as mobile, search and social networking. Learn the measurement techniques used in evaluating digital marketing efforts. Learn and understand the ethical and legislation impact on digital marketing. Each course will be taught with the help of case studies, live corporate examples and general discussions. In order to provide greater industry insights, business leaders from different industries may be invited to share their experiences. There would be a pre-work and post work component in each module.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)

**Approved by AICTE *Permanently affiliated to JNTUH *NBA Accreditation*

Kandlakoya (V), Medchal Road, Hyderabad -501401.

CEER

Report on IIEECP Phase-1 Workshop during A.Y:2017-18– Reg.

40 faculty members from various disciplines have participated in IIEECP pre Certification workshop from 14th-19th May, 2018 at CMRCET, Hyderabad. The One Week hands-on and face-to-face workshop was conducted by Dr. Neeraj Buch, Professor in Department of Civil Engineering and IUCEE Member, Michigan State University at CMRCET. The Resource person Dr Neeraj Buch is a global expert in engineering education educated the participants on understanding the principles of learner-centered teaching; to design or redesign a course and its elements, emphasized on learning outcomes.

Outcomes of the IIEECP Phase-1 Workshop:

Create a dynamic classroom using the variety of active learning strategies learnt and practiced Identify multi-disciplinary approach required in solving an engineering problem

ii) Improve the quality of tests and quizzes substantially based on a deeper awareness of effective assessment principles and practices

iii) Implement collaborative learning in order to develop real world professional skills and to build interpersonal team skills of students



**CMR COLLEGE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)**

Kandlakoya, Medchal Road, Hyderabad -501401

EXAMINATION BRANCH

Date: 17-07-2017

Report on Faculty & Staff Awareness Program on Examination Procedure

An awareness program on "Faculty & Staff awareness program on examination Procedures" has been successfully organized on 15-07-2017 in Mechanical seminar hall. The speakers highlighted the points such as importance of Academic Regulations, Instruction of various examination activities faculty and staff roles during examinations and evaluation system. The faculty and staff members of all departments have attended and got benefited with this program.

(Dr. M. Narsi Reddy)
Controller of Examinations
Controller of Examinations
CMR College of Engineering & Technology
(Autonomous)

Outcomes of the Faculty Development Program Cell:

- It helped in enriching the faculty vitality in key domains of teaching, assessing, research, professionalism, and administration is perceived to improve educational environment significantly and enhances the academic performance of learners to strengthen the CMR College of Engineering & Technology.
- The Faculty Development program Cell regularly conducted faculty empowerment programs. Teachers have a repertoire of effective teaching strategies and used them to implement well-designed teaching programs and lessons. They regularly evaluate all aspects of their teaching practice to ensure they are meeting the learning needs of their students
- Every time a faculty comes out of a FDP & training programme, the student community feels the difference in teaching skills, depth of knowledge and teaching pedagogy used by the faculty in the class room. The CMR College of Engineering & Technology
- FDP Cell program designed and delivered programs effectively enrich faculty out comes in the following modes:
 - Begin with a clear vision (Structural Empowerment)
 - Maintain the right perspective (New Knowledge, Innovation, Improvements)
 - Network (Transformational Leadership)
 - Be responsive and take the initiative (Professional Practice)
 - Exhibit integrity (Empirical Quality Results)



Convener