

WE SEE DEPARTMENTS DIFFERENTLY

E&TC











MODERN EDUCATION SOCIETY'S COLLEGE OF ENGINEERING

Wadia College Campus, PUNE-01

Phone No: 020 - 2616 3831

Email Id: principal@mescoepune.org

Website: www.mescoepune.org

Department of Electronics & Telecommunication Newsletter Volume – 14 Issue 23, JULY-DEC 2022

VISION

To Groom - Motivated, Environment friendly, Self-esteemed, Creative and Oriented Engineers.

MISSION

To Develop Industry Oriented Manpower to accept the challenges of Globalization, by promoting Value Education through motivated trained faculty, by maintaining conducive environment for education at affordable cost, by promoting Industry Institute interaction, by involving alumni.

****	*
	~

CONTENTS

FROM HOD'S DESK	4
FROM THE EDITOR'S DESK	5
Staff Members	5
Class Toppers	6
Faculty Achievement / Special Work	7
Department Activities / Guest lectures	9
Activities for the Students	15
Extra-Curricular Activities	10

<u>FROM HOD'S DESK</u>

It gives me an immense pleasure to write a few words for our newsletter. Education plays an important role in enabling a person to face a real-life situation with adequate knowledge. The current era is referred to as the era of Information and Technology. Sustained advancement in the previous decade has led to the burst of Internet and Wireless Communication. The processing performances once exclusive to Super Computers are now available in handheld personal digital devices. Improvements in Integrated Circuits have enabled space explorations, made automobiles more efficient, revolutionized the nature of warfare are brought vast libraries of information into our Web Browsers and made world a more interdependent place. As a part of this, MESCOE has made outstanding progress in academic, co-curricular, extra-curricular activities.

We, as Electronics & Telecommunication department always expose our students to various activities such as ASTITVA, ROBOCLUB, E-BAJA, ETSA, etc. My best wishes to all the readers for scaling bigger success and achieving newer heights in future!

Dr. P.P Mane HOD, E&TC

FROM THE EDITOR'S DESK

Greetings!

Through this newsletter I had the opportunity to reflect our departmental activities carried out in last semester. This newsletter is intended to be published twice in an year. It would be a snapshot of the various activities and advancements for all associated with E&Tc department.

I am delighted to stay connected with you through this Newsletter 2021-22 which contains the details about the activities carried out in the last semester.

I appreciate your support and feedback

Prof. U. D. Dattasamje

STAFF MEMBERS

1	Dr. M. P. Dale	10	Mr. S. S. Pansare
2	Dr. P. P. Mane		Mrs. U. V. Bomble
3	Dr. P. B. Chopade (HoD)		Mrs. N. Masood
4	Dr. P. N. Kota	13	Mrs. Y. M. Ajgar
5	Ms. B. M. Narute		Mrs. U. D. Dattasamaje
6	Mr. S. N. Dharwadkar	15	Mrs. M. M. Dhanvijay
7	Dr. K. S. Tiwari	16	Mrs. P. M. Bagul
8	Ms. A. A. Dhavalikar	17	Ms. P. S. Tondewad
9	Dr. R. S. Kadam		

CLASS TOPPERS:

TOPPERS OF SE Mali Sanskrati Magdum Bharucha Kakade Patankar Trupti Murtaza Sidhant Rashmi SGPA SGPA 9.43 SGPA 9.37 SGPA 9.36 SGPA 9.34 9.52 TOPPERS OF TE Bedre Bagekar Desarda Ammit Hirve Nihar Gangawan Dipali Rishikesh Kunal SGPA 10 SGPA 10 SGPA 10 SGPA 10 SGPA 10 TOPPERS OF BE Burhade Mutha Sapkal Sakinal Shendkar Swapnajeet Shrenik Yogeshwar Pranil Aparna SGPA SGPA 10 SGPA 9.98 SGPA 9.95 SGPA 9.98 9.98

Faculty Achievement / Special Work:

- 1. Ms. Pratiksha Nandanwar, "Analysis of Pixel Intensity Variation By Performing Morphological Operations For Image Segmentation On Cervical Cancer Pap Smear Image", IEEE International Conference on Computational Intelligence and Computing Applications-21 (IEEE-ICCICA-21)26-27 November, 2021, Nagpur, INDIA, 2021-22.
- 2. Dr. Pranoti P. Mane, "Comprehensive Study of Brain Computer Interface(BCI) with emphasis on Signal Processing Strategies", 2021-22.

WORKSHOP / FDP ATTENDED :

Sr. NO.	Name	Workshop Attended
1	Mrs.Aparna Kulkarni	
		1) FDP on "Elevated Analytics: Blockchain Deals With Big Data"
		Training program on Fundamentals of AI with ICT Academy of Tamil Nadu.
		3) Webinar on Role of teachers in NEP implementation
		4) International STTP through ICT mode on 'Advanced Applications in Artificial Intelligence and Machine Learning'
		5) One week Faculty Development Programme on Data Science and Artificial Intelligence
		6) Faculty Orientation Workshop on TE(E&TC) revised syllabus (2019 Course) on Electronic Measurements
		7) 5 Day Faculty Development Program on "Augmented Reality & Virtual Reality"
		8) SWAYAM ARPIT ONLINE COURSE CERTIFICATION Refresher Course on Teacher and Teaching in Higher Education
2	S. S. Pansare	1) Three days Online faculty orientation workshop on TE E&TC revised syllabus 2019 course for the subject Database management
		2) Attended webinar on" Role of IPR in Innovation and technology"
		3) Participated in "International Yoga Day-2021"
		4) Completed 30 days Internship on Renewable energy at Pantech e Learning, Pantech Solutions
		5) Participated in the "One Week National Level STTP on LaTeX"
		6) Conference on Advancements in Communication, Computing and Electronics Technology
3	Dr. P. N. Kota	1) Engineering, M. E. S.'s College of Engineering, Pune on 19 th & 20 th April 2022.
		2) One week online Certificate Course on Digital Teaching Techniques

		3) Completed Four Week online Coursera Certification Course on Intro to Analytic Thinking, Data Science and Data Mining at University of California 4) Two day online Faculty Orientation Workshop on SE(E&TC/Electronics) Revised Syllabus 2019 Course for the Subject Data Analytics Lab 5) Innovation Ambassador training (Foundation Level, Total 16 Sessions of 30 contact hours) by MoE's Innovation Cell & AICTE 6) The syllabus designing of the subject Computer Network and Digital Communication at TE(E&TC) Syllabus Revision 2019, BOS(E&TC) SPPU
4	Prof. U. V. Bomble	1) The syllabus designing/framing of the subject Electromagnetic Field Theory at TE(E&TC) Syllabus Revision 2019, PICT, BOS(E&TC) SPPU, PUNE
		2) The syllabus designing/framing of the subject Skill Development on TE(E&TC) Syllabus Revision 2019, BOS(E&TC)
5	Prof. Y. M. Ajgar	1) The syllabus designing/framing of the subject Electromagnetic Field Theory at TE(E&TC) Syllabus Revision 2019,PICT, BOS(E&TC) SPPU, PUNE
		2) Attended webinar on" Role of IPR in Innovation and technology"
		3) Participated in "International Yoga Day-2021"
		4) "One day FDP on Interaction on NAAC online Paradigm Shift"
		5) Online FDP on Introduction to machine Learning
		6) Online FDP on Development of Machine Learning Techniques for solving real world problems
		7) The syllabus designing/framing of the subject Introduction to Block Chain on TE(E&TC) Syllabus Revision 2019, BOS(E&TC)
6	Mrs. M. M. Dhanvijay	1) Faculty Orientation Workshop TE (E&TC) Revised Syllabus 2019 Course Subject: DIGITAL SIGNAL PROCESSING (Elective-1)
		2) 1 week FDP on "Product Design, Development and Manufacturing Through a Boot camp "
		3) Attended webinar on" Role of IPR in Innovation and technology"
7	Dr. K. S. Tiwari	1) Attended online 5 days digital Teaching Techniques organised by ICT academy
		2) Faculty Development Program on Stress Management (Online Live FDP)
		3) "Role of IPR in Innovation and Technology", organized by IIC and E&TC Dept, MESCOE
		4) AICTE Sponsored Impact Lecture Series on "Student's Mindset and a Beginner's Guide for Startup"
		5) Attended the faculty orientation workshop on TE E&TC revised syllabus (2019 C) under the aegis of Board of Studies (E&TC/ Electronics) Savitribai Phule Pune University
		6) Participated in the event "Webinar on Business Model Canvas"

		7) Participated & completed successfully ATAL Academy Online Elementary FDP on " Smart cities for sustainable development"
		8) Participation Certificate for AICTE-ISTE sponsored Online Induction/Refresher Programme (3rd Phase) on "Active-Teaching Learning Process"
8	Prof. U. D.	1) Webinar on "My Story:Motivational Session by Successful Innovator"
	Dattasamje	2) Faculty Development
		Program on "Outcome Based Education and NBA Perspective"
		3) Faculty Orientation Workshop on TE(E&TC) revised syllabus (2019 Course) under the aegis of Board of Studies (E&TC/Elex.)
		4) Electronic Measurements (304185b) Faculty Orientation Workshop on TE(E&TC) revised syllabus (2019 Course) underthe aegis of Board of Studies (E&TC/Electronics)
		5) Faculty Orientation Workshop on TE E&TC revised syllabus 2019 for the subject Computer Network under the aegis of Board of Studies E&TC
9	Prof.	1) Faculty Orientation Workshop on TE E&TC revised syllabus 2019 for
	B.M.Narute	the subject Computer Network under the aegis of Board of Studies E&TC

DEPARTMENT ACTIVITIES:

Guest Lecture on "Internet of Things and it's Applications"

Date: 10/12/2021

Academic Year: 2020-21

Objectives:

- 1. To introduce student to the concepts of Internet of Things and its applications.
- 1. Encourage student to explore and built their own IOT projects.
- 2. To make students understand importance of IoT, its relevance in Electronics Industry.

Outcomes:

Students are able to understand

- Architecture of IoT
- Applications on usage of using mobile simple devices like Bulb, motor, lock can be controlled using simple software tools like graphana, etc.
- Real Life examples

Target group: SE, TE E&Tc students

Time frame: 1:30 pm onwards

Platform: Offline mode (Seminar Hall 514)

Total No. of Present

Students: 56

Resources Person: Prof. Dr. Abhijeet Deogirikar, Founder & Director at CopperCloud

IoTech Pvt. Ltd

Faculty Co-ordinator: Dr. K. S. Tiwari & Y. M. Ajgar





Guest Lecture on "PL-SQL" in Database Management."

Date: 17/11/2021

About Speaker: Prof. Shraddha Khonde

Topics Covered;-

- Introduction to PL-SQL
- Advantages of using PL-SQL
- Difference between SQL and PL-SQL
- Architecture of PL-SOL
- Block Structure
- Variable Declaration & use
- Control statements: IF-THEN, IF-ELSE, IF-THEN-ELSIF, IF-THEN-ELSEIF-ELSE, CASE
- PL-SQL Loop
- Stored Procedures
- Create procedure
- Program on Stored procedure: Students marks Grade calculation
- Program on procedure; Library fine calculation

Objectives:

- 1. To enhance the programming skills in My SQL.
- 2. To understand the features of PL-SQL and to apply for practical applications.
- 3. To use PL-SQL for library application.

Outcomes:

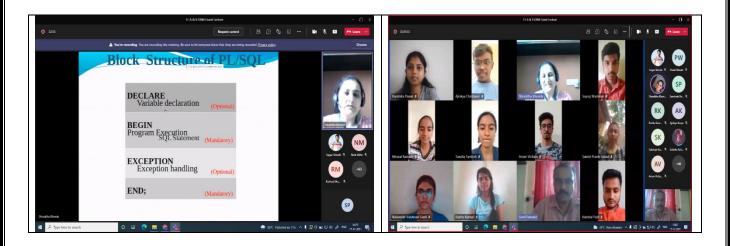
Students will be able-

- 1. To have knowledge on SQL-DBMS and programming
- 2. To explain the details about SQL-DBMS in oral examination.
- 3. To know about different applications of SQL-DBMS in various fields.

Target group: TE E&TC Students

No. of students Present: 66

Time frame: 2:00PM to 4:00PM (2 Hrs) **Resources Person:** Prof. Shraddha Khonde **Faculty Co-ordinator:** Prof. S. S. Pansare



Guest Lecture on "Recent trends in RF and

A.Y: 2021-22 Semester-I

Activity Organized by: Prof.G.V.Bomble **Target Audiance**: TE (E & TC), TE faculty. **Resource person**: Renuka Wekhande-Andankar

Sr. Application Engineer –Pathwave Design Software,

Keysight Technologies ,Banglore

Objectives:

1. To enhance the knowledge of Electromagnetics.

2. To understand the RF circuit and to apply for practical applications.

3. To learn RF and Microwave circuit design.

Topics Covered:

Frequency Spectrum and Wireless Standard

What is RF Circuit and What's the need

Building a chip RF circuit

RF and Microwave Industry Trends

Multi Technology Module

Using Path wave ADS for RF and Microwave circuit Design

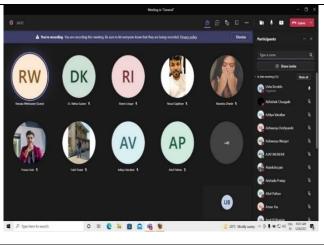
LNA Fundamentals

MMIC Design Flow

No. of Students Present: 55

Day &Date: 8th December 2021, 10:00AM to 12:00PM





Guest Lecture on "State Machines" in Digital Circuits Date: 17/07/2021. A.Y-2021-2022

Objectives:

- 1. To enhance the knowledge of Sequential Circuits.
- 2. To understand Mealy and Moore machines.
- 3. Concepts of sequential circuits and to analyse sequential systems in terms of state machines.

Topics Covered:

- 1. Finite state machine
- 2. Moore machine
- 3. Mealy machine
- 4. Examples for Mealy and Moore machines.
- 5. How to make state Diagrams.

Target Audience: SE E&TC students

No. of Students Present: 111 Time Frame: 1:00PM to 4:00PM

Resources Person: Dr.K.S Tiwari MES College of Engineering Pune.

Faculty Co-ordinator: Prof. G.V. Bomble



Guest Lecture on "Introduction Session on Winter Internship by "lvl Alpha Pvt. Ltd".

Date -06/12/2021

Target Audience : TE & BE students (All branches)

No. of Students Present: 96

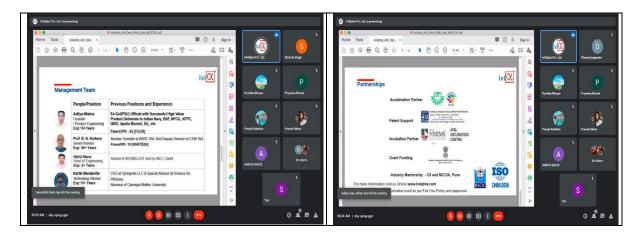
Objectives:

- 1. To enhance the Opportunities of Internship to Students.
- 2. To understand the current trends in the market.
- 3. To encourage students for startups.

Venue: Online on Google Meet

Resources Person: Mr. Aditya Mishra, Founder, IvI Alpha Private Ltd, Pune

Faculty Co-ordinator: Prof. S. S. Pansare



Guest Lecture on "Online Informative Session on "Study abroad-for EnTC Engg students"

Date- 14/08/21

Objectives:

• To create awareness in students about the opportunities available abroad for E&TC Engineers.

• To spread awareness among the students about how to prepare and what to prepare for the admissions in abroad universities.

Name of the Guest Speaker: Mr. Shreyas Ramakrishnan, Business Head. Jambroree Education Pvt. Ltd

Target Audience: SE, TE, BE E&TC students

No. of Students Present: 50

Time frame: 11:00 AM to 12:30 PM

Faculty Coordinators: Prof. Y. M. Ajgar & Prof. P. M. Bagul



Guest Lecture on "Series by R&D cell on writing Literature Review".

Date - 31/07/21 & 07/08/21

Guest Speaker – The invited Speaker, Prof. Prathamesh P. Churi (Prof. Patrick), SMIEEE, MACM, LMCSI, LMIAENG, MIGIP Ph.D. - Pursuing (Data Privacy), M.E (Information Technology), B.E. (Computer Engineering) is a Best Young Research Awardee 2019 - GISR Foundation and currently working as a Assistant Professor (Computer Engineering), NMIMS University, India.

Objectives:

- To create awareness and opportunities in Research and development among the faculty and students.
- To undertake research activities and fetch grants offered by various agencies.
- To promote Institute R&D cell Industry collaboration.

Outcomes:

- Encourage and motivate faculty to take research initiatives.
- Help the faculty to write Journal Paper of high standards.

Toipcs:

Day 1: How to do Literature Survey.

Day 2: Hands on session on Mendeley Reference Manager

Total No. of Staffs Participated: 30

Resources: The invited Speaker, Prof. Prathamesh P. Churi (Prof. Patrick), SMIEEE, MACM, LMCSI, LMIAENG, MIGIP Ph.D. - Pursuing (Data Privacy), M.E (Information Technology), B.E. (Computer Engineering) is a Best Young Research Awardee 2019 - GISR Foundation and currently working as a Assistant Professor (Computer Engineering), NMIMS University, India.

Faculty Coordinator: Dr. R.S. Kadam-Group Leader (R&D Cell) and R&D cell members.



Guest Lecture on "Series by R&D Cell on Journal Selection for Research Paper Publication".

Name of Activity: Guest Lecture on "Series by R&D Cell on Journal Selection for

Research Paper Publication"

Objectives:

- To get the staff article published in a well-reputed journal with a high impact factor.
- To undertake research Publication activities.
- To promote Research Publication in the Institute.

Outcomes:

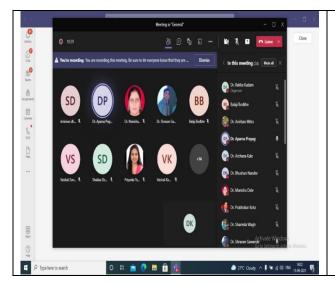
- 1. Encourage and motivate faculty to take research initiatives.
- 1. Help the faculty to write Journal Paper of high standards.

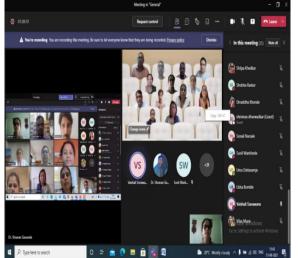
Total No. of Staffs Participated: 47

Day & Date: Wednesday, 15th September 2021

Time Frame: 2:15 PM

Resources: Dr. Gawande, In-charge PG courses & Industrial Tribology Laboratory (ITL) of Mechanical Engineering, Modern Education Society's College of Engineering, Pune-411001 **Faculty Coordinator:** Dr. R.S. Kadam-Group Leader (R&D Cell) and R&D cell members.





Event: Computer Networking and Industrial opportunities in Networking Domain

Academic Year: 2021-22

Program/ Activity: Guest Lecture on Computer Networking and Industrial opportunities in

Networking Domain

Program Driven By: Prof. Bharati Narute, Prof.Umadevi Dattasamje

Program Type: Technical Speech **Program Theme**: Industrial Awareness

Start Date: 9 th December 2021 End Date: 9 th December 2021

Total Duration: Two hours **Number of Participants: 75**

Mode of session delivery: Online Mode

Objective:

To make industrial awareness for computer networking softwares utilised and opportunities in industry .

a) Outcome in terms of Learning/ Skill/ knowledge obtained: - Participants got a clear idea about

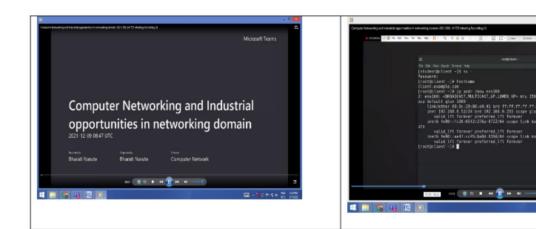
which industrial opportunities in networking domain.

b) PEOs satisfied: PEO2

c) PO achieved: PO1 and PO12

Name of activity Coordinator: - Prof. Bharati Narute, Prof. Umadevi Dattasamje

Name of Trainer: Mrs. Manjiri Tila



WORKSHOPS

Event: Workshop on RED HAT Enterprise Linux 8

Academic Year: 2021-22

Program Driven By: Prof. Bharati Narute, Prof. Umadevi Dattasamje

Program Type: **Technical Speech**Program Theme: **Industrial Awareness**

Start Date: 29th **September 2021** End Date: 8th October 2021

Total Duration: Two hours per day online mode

Number of Participants: 137

Overview:

a) Objective: To make industrial awareness for computer networking softwares utilised in industry.

b) Outcome in terms of Learning/ Skill/ knowledge obtained: - Participants got a clear idea about which industrial applications are utilised computer networking domain in industry

Name of activity Coordinator: - Prof. Bharati Narute, Prof. Umadevi Dattasamje

Name of Trainer: Mrs. Manjiri Tilak



Winter Internship by lvl Alpha Pvt.Ltd

Academic Year: 2021-22 Semester-I

Name of activity: Introduction Session on Winter Internship by lvl Alpha Pvt.Ltd Objectives:

- 1. To enhance the Opportunities of Internship to Students.
- 2. To understand the current trends in market.
- 3. To encourage students for start ups.

Company profile:

lvlAlpha are an Early Stage, Defence Tech Startup building Wearable Health and Communication devices for Defence Tri-Forces.

Company Vision is to "Accelerate the Growth of Technology to Mitigate High Risk Environments and improving Human Existence."

Company supported and based in Niti Aayog backed Atal Incubation Centre (AIC), Mumbai and supported in acceleration by Department of Science and Technology(DST) Backed TBI.India.

Company Supported in Grant by Ministry of Electronics and Information TechnologY (MeitY), India Entrepreneurship Grant 2020 and SASACT Grant 2020.

Company currently rolling out our Covid-19 Global pandemic Response solution CBRN Grade PICs and Trauma Monitoring Software for Defence Forces.

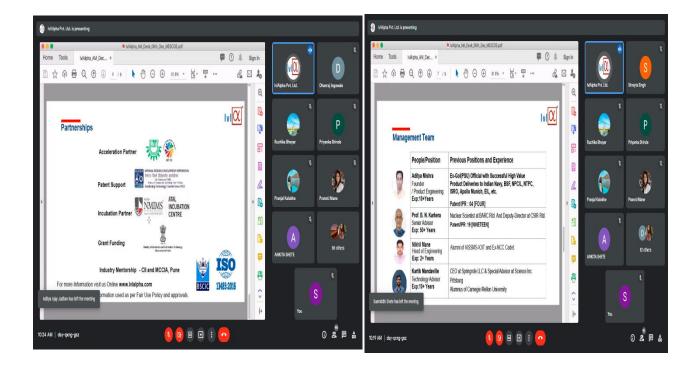
Target Audience : TE & BE students (All branches)

No. of Students Present: 96

Day &Date: 06th December, 10:00AM to 10:45AM

Venue: Online on Google Meet

Resources Person: Mr. Aditya Mishra, Founder, IvI Apha Private Ltd, Pune.



Career options and opportunities for Electronics Graduates

Name of Activity - Career options and opportunities for Electronics Graduates Objective-

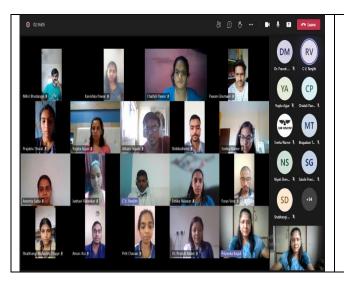
- 1) To gain Knowledge regarding Future enhancement of Electronics Branch.
- 1) Higher Studies in Electronics sub branches.
- 2) To gain knowledge about Electronics Industry.

Name of the Speaker/ Guest: Mr. Renjith CV, Electrical Architect-Medical Imaging at Philips HealthCare. Expertise in X-Ray Imaging design for Cathlab, C-Arm, and Diagnostic X rays Systems.

Targeted Audience: SE, TE and BE students.

Number of Staff Members: 8 Number of Students Presents: 97

Date: 20th July 2021. **Time:** 10am to 1.00pm.





Role of IPR in innovation and technology

Objective:

The main objective of the session was to understand the importance of IPR in innovation and technology.

Outcome:

Audience acquainted importance of IPR, types of IPR and role of IPR in innovation and technology.

Name of Speaker: Mr. Swapnil M. Sanap. Associate Partner (Associate Director) & Head of Pune Office @ Khurana & Khurana, Advocate and IP Attorneys. Expertise in Patent searching, Patent drafting, Patent Prosecution, Patent Oppositions Infringment Analysis. The session mainly covered the following points in details:

- * Role of Intellectual Property & rights in Innovation and Technology.
- ❖ Patent is a legal right to the creator of the invention and is not a legal document.
- Conditions for Patentability.
- ❖ Patent Life Cycle (Three Phases in Patent life cycle).
- Commercialization of the invention

Total Number of Participants: 135

Date: 26th November 2021 **Time Frame:** 2:30 PM to 4 PM

Faculty Coordinators: Dr. P. N. Kota & Dr. K. S. Tiwari

Inauguration of "Honeywell Center of Excellence for Youth Empowerment"

Modern Education Society's college of Engineering has organized Inauguration of "Honeywell Center of Excellence for Youth Empowerment "in association with ICT on 13th Nov 2021. Session started with 'Saraswati Vandana' in presence of,

Mr. Suresh Babu L (Head -corporate and Government initiatives ICT Academy),

Date: 13th November 2021

Time: 10:30 AM

Participants: Staffs & Students

Resources: Prof. Nabhega Masood (ICT Academy, Coordinator - CoE)

Faculty Coordinator: Dr. Kanchan Tiwari, Dr. Jayshri Pansare, Prof. Aparna Dhavlikar, Prof. Shobha Raskar, Prof. Yogita Ajgar, Prof. P. Mohite, Prof.

Savita Mane, Prof. Rupali Shende





[Guest with students and staff]s

BE Project Review I Presentation

Activity: BE project Review I presentation

Objectives:

- 1. To know progress last month and expected progress next month.
- 2. To discuss current issues, and plans to deal with them.

Outcomes:

1.Students will get important guidelines about project.

2. Students will get solutions or ideas to implement project.

Date: 13th August 2021 **Time:** 9:00 AM to 11:45AM **Total No.** Groups: 38/48

Venue: Class room no. 315, 418, 421, 516 and 517

Faculty Coordinators: Prof. R. S. Kadam & Prof. M. D. Katole



Extra-Curricular Activities

EVENT NAME: RIDDLE RIDE

DATE:20th NOVEMBER 2021

TOTAL PARTICIPANTS: 30 ATTENDEES

TIME: 12 PM

PLATFORM: MS MICROSOFT TEAMS

OBJECTIVES:

- 1.To enhance problem solving and critical thinking skills.
- 2.To increase participation in activities other than academics.
- 3.To take the necessary precautions of covid 19 by conduting the session online.

BRIEF SUMMARY:

This event was organised by the enthusiasts club team core committee where 30 students grabbed this opportunity to build up their logical thinking and were present online for a 2 hour riddle solving session. The event was a huge success and winners were also selected and the clubs website was also launched after this event which marked it important.