



GOVERNMENT POLYTECHNIC KOLHAPUR ELECTRONICS ENGINEERING DEPARTMENT E-NEWS LETTER



VOLUME : II

DATE: 05/11/2022

VISION OF INSTITUTE

Institute of high recognition to develop competent technicians for quality professional services and entrepreneurship to cater the needs of industry and society.

MISSION OF INSTITUTE

M1: To educate and train in multi-disciplinary multi-level programmes to develop competent technicians and skilled manpower for industrial needs.

M2: To ensure employability, encourage entrepreneurship, promote lifelong learning.

M3: To inculcate in students the qualities of a good citizen at individual, social and professional level.

M4: To provide quality management system with focus on effective student-centric education and high recognition

VISION OF PROGRAMME

Programme of high recognition and flexibility for the development of competent technical manpower in the profession of Electronics and Telecommunication .

MISSION OF PROGRAMME

M1: To provide technical education of high recognition to the aspiring learners.

M2: To empower student's competency to fulfill nation's project of Digital India

M3: To adapt student centric approach in teaching-learning process to mould students for skill oriented professional, social and ethical practices

M4: To utilize flexibility in curriculum development to incorporate recent and emerging advancements in the field of Electronics & Telecommunication

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

Diploma graduates will:

PEO1. Apply fundamental knowledge of Basic Sciences, Mathematics and Electronics & Telecommunication engineering in problem solving.

PEO2. Operate, demonstrate and debug the systems in the field of Electronics & Telecommunication engineering and to resolve real life problems.

PEO3. Attain technical knowledge, skills and attitude to acquire further advancement in technology.

PEO 4. Work as a responsible team member of an organization to achieve its goal or can be an individual entrepreneur.



GOVERNMENT POLYTECHNIC KOLHAPUR ELECTRONICS ENGINEERING DEPARTMENT E-NEWS LETTER



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MESSAGE FROM PRINCIPAL Dr.D.M. GARGE



Dear students and the department staff, I congratulate every one of you as you all have defended covid-19 disaster and successfully completed the last semester workload. Not only this, we together have performed well in the curricular and co-curricular activities. The TECHNO ENHANCE 22 was the culminating point of all the semester long activities. Our third year students have been selected by many industries either for internship or for permanent employment. I am confident about their progress in the higher studies as well.

The coming semester is very important as we are going to face the NBA committee. We have to understand the NBA philosophy deeply and work accordingly. The students are expected to know the terms like COs and POs-PSOs. I appeal every individual to put your best in this and coming semesters which will help us to strengthen NBA culture in the department and the institute.

Thank you...



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MESSAGE FROM Dr. R.K. SAWANT VICE PRINCIPAL

5G : Exiting Time for Indian telecom industry

India inaugurated the 5G era in the country with Prime Minister Narendra Modi announcing the launch of 5G at the India Mobile Congress (IMC) recently.

While Bharti Airtel launched the 5G services two days back, Jio announced the launch of its beta 5G services, available only through an invite, today.

As of now, Airtel 5G services are available only in eight cities: Delhi, Nagpur, Varanasi, Chennai, Hyderabad, Siliguri, Bengaluru and Mumbai. The company announced that it would be covering the entire country by March 2024.

Reliance Jio's 5G service will be available in four cities of Delhi, Mumbai, Kolkata and Varanasi initially before it is expanded across the country by December 2023. The service provider decided to launch on the day of Dussehra (a major Indian festival celebrating the victory of good over evil) on October 5. The Jio subscribers will get unlimited data with 1 Gbps speed as part of the True 5G Welcome offer.

On the other hand, Vodafone Idea is yet to reveal the launch plan of 5G services. The indications are that it will be some time before the service provider is able to launch 5G services as it is yet to close 5G gear deals.

India's government-owned service provider, Bharat Sanchar Nigam Limited (BSNL) plans to launch 5G services by August 2023. The service provider is yet to launch 4G services, so there will be hardly any gap between the introduction of BSNL's 4G and 5G services.

5G pricing

While neither Airtel nor Jio have revealed the 5G prices, the indications are that they will not be charging a premium for 5G services. Airtel's services are available at 4G rates and don't require a SIM change. With Jio's Akash Ambani, Chairman, Reliance Jio, saying that 5G should be available to "every citizen, every home, and every business across India," it is clear that Jio's 5G pricing strategy will be similar to its 4G strategy and will focus on keeping the services affordable for common people. Jio could possibly set the tone and ensure that Airtel and Vodafone Idea also keep the 5G tariffs economical to prevent churn of their subscriber base.

Jio is also referring to its 5G services as 'True 5G' to set its services apart from others since it is the only telco to have procured 700 MHz spectrum, which it might use.

All three top telcos made a slew of announcements over the last few days during India Mobile Congress (IMC). Vodafone Idea demonstrated several use cases, including immersive mobile 5G cloud gaming, SmartAgri for farmers and Gurushala (cloud-based collaborative knowledge exchange platform for teachers and students), among others. On the other hand, Airtel demonstrated Holographic as one of the 5G use cases.

Reliance Jio touted the fact that its Jio True 5G is powered by Jio Platform's 5G technology - built indigenously by Indian engineers at Jio.

India concluded 5G auctions about two months back, and this is possibly the fastest launch of a new technology network. Even so, while Airtel and Jio might have launched the services, it seems to be a token launch as it will be some time before the Indian citizens will be able to enjoy the services as the coverage is limited.

They are investing around \$19.5 billion in building 5G networks by 2025, according to a recent GSMA report. Over the next few months, the service providers will be expanding the services in newer areas and introducing new use cases. All in all, exciting times ahead for Indian telecom industry!





GOVERNMENT POLYTECHNIC KOLHAPUR ELECTRONICS ENGINEERING DEPARTMENT E-NEWS LETTER



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MESSAGE FROM SHRI D.K. LAMTURE HOD E&TC



We are glad to bring out the exciting & informative second edition of the Electronics Departments Newsletter. I congratulate our editorial team for bringing out this second edition of the Newsletter as per the department's schedule.

The contents are neatly organized and cover all the activities conducted in the department. The Newsletter not only provides events & activities in chronological order but also contains informative articles on advanced technical topics such as 5G, SCADA, Machine Learning, etc.

The Newsletter reflects departments' efforts for the benefit of students in Curricular, Co-curricular & Extracurricular activities.

What excited me more is the contribution of our students to the Newsletter. I appeal to our other faculties to contribute more in the coming issues of the Newsletter. I thank our Principal Dr. D.M. Garge sir for guidance, motivation & continued support in carrying out this activity.

I wish all the best to our editorial team & contributors for future issues of the Newsletter.

Shri D. K. Lamture

Head of the Dept. Electronics & Telecommunication

Techno-Enhance 2K22- A state Level Symposium

The department of Electronics and Telecommunication, Industrial electronics under the sponsorship of EESA (Electronics Engineering Student Association) has organized a state level event "Techno-Enhance 2K22" on 12th and 13th May 2022.

Following events had been organized :

- 1) Circuit Mania
- 2) Code Ranger
- 3) Web Dev
- 4) Innovator
- 5) Robo Racing
- 6) Poster Presentation
- 7) Quiz Master
- 8) Game Zone



GOVERNMENT POLYTECHNIC KOLHAPUR
First Autonomous Institute of Govt Maharashtra

Electronics Engineering Students Association (EESA), Organizing

TECHNO ENHANCE 2K22

12 & 13 MAY TIME 9 AM TO 6 PM

PRIZE POOL UPTO ₹10000

CIRCUIT-MANIA	CODE RANGER	WEB-DEV	INNOVATOR
Entry fee: ₹100 Assemble the given circuits. 2 per team. CP: 7666237113 Prasad	Entry fee: ₹50 Program a C code in notepad on a given question. CP: 9371088834 Guru	Entry fee: ₹50 Make website using VS Code on HTML & CSS. CP: 9371088834 Guru	Entry fee: ₹80 Present your project/ business ideas. 2 per team. CP: 9307986159 Shriya
ROBO-RACING	POSTER PRESENTATION	QUIZ MASTER	GAME-ZONE
Entry fee: ₹150 Make your Robo-car to race in arcade track. 3 per team. CP: 7666237113 Prasad	Entry fee: ₹80 1) AI Technology 2) Industry 4.0 3) IoT 2 per team. CP: 9422652103 Anirudha	Entry fee: ₹100 Quiz on general knowledge & course related questions. 2 per team. CP: 9307986159 Shriya	Entry fee: ₹50/Head Games: 1) BGMI 2) PES 2021 3) Ludo-King CP: 7219544593 Manas

Refreshments, Certificate & rulebook will be provided to each participant.

To register visit eesa.unaux.com or Call: 9371088834

Payment: 9371088834 Gurudatta

Abhishek Chavan EESA President
Diksha More EESA Vice President

Venue: Government Polytechnic, University Road, Vidya Nagar, Kolhapur, Maharashtra 416004

Mr. S.B.Mote EESA Coordinator Mrs. M.Y. Sonule EESA Coordinator Mr. D.K.Lamtore HOD EITC Dr. R.K.Sawant HOD IE Dr. D.M.Garge Principal

Techno-Enhance 2K22- A state Level Symposium

Circuit Mania

♦ Winners of Circuit Mania

Dev B Patil, Avadhut S Parulekar (FY G P Kolhapur)
Hemmady K Sutar, Gathe S Vikas (SY G P Kolhapur)
Aishwarya Karde, Abhijit S Shinde (TY G P Kolhapur)



To the optimist, the glass is half full. To the pessimist, the glass is half empty. To the engineer the glass is twice as big as it needs to be.

Techno-Enhance 2K22- A state Level Symposium Robo Race



An interesting event Robo Race was organized under Techno Enhance2K22. Students had given amazing response to this event. Mr. S S Pujari and Mr. Aniket khandekar conducted this event successfully. Special track was designed and Robo created as per the space available. Not only participants but audience also enjoyed this interesting event. This event was mixture of technology and gaming.

♦ **Winners of the Robo –Race event:**

Prathmesh R Jadhav, Udayraj A Garje, Sanika L Kachare from Government Polytechnic karad

♦ **Runner ups of the Robo –Race event:**

Irfan S Mulani, Siddhesh B Sarnaik, Harsh A Dharmadhikari from Government Polytechnic Kolhapur.

♦ **Winners of Poster Presentation**

Simran Bargir, Supriya Bargir

♦ **Winners of Web Development**

Gopal Dose form G P Kolhapur

♦ **Winners of Code Ranger**

Vaishnavi Sable

♦ **Winners of Quiz**

Shreeshail S Chavan, Suraj S Chavan from FYIT G P Kolhapur

♦ **Winners of Innovators**

Atharva Dinde, Sharvan Vankudre SYME G P Kolhapur

♦ **Winners of Free Fire (Game)**

Raswardhan P Shinde, Atharv Y Sutar

♦ **Winners of Ludo (Game)**

Sai Chavan

Inauguration of Electronics Engineering Department E-News Letter Volume I



Electronics Engineering Department E-News Letter Volume I was published and inaugurated by honorable Principal Dr. D M Garge accompanied with Head of ENTDC department Shri D K Lamture and Head of Industrial Electronics Department Dr. R. K. Sawant along with faculties of Electronics department. This E-News letter volume I is designed by Prof.. P.V.Itkalkar and Prof. M.S.Datar under the guidance of Hon. Principal and Hon. HODs.



Welcome and Orientation Program

A grand Welcome and orientation program for second year and third year students was arranged by Electronic department. As the students came to college after covid-19 pandemic situation after a long gap, students are made aware about the activities conducted in the department and discipline to be maintained while attending the college. Staff made students to feel comfortable by giving valuable advice through their speech.



One day work shop on PLC and SCADA

One day work shop was conducted on PLC and SCADA

One day work shop on PLC and SCADA was conducted on 05/03/2022 for third year Electronics and Telecommunication and Industrial Electronics students. The workshop was conducted in the view to aware the students about industrial needs regarding PLC and how the subject is important in view of the future scope. The experts from Sofcon India Private limited has delivered the lecture and explained thoroughly about basics of PLC and SCADA with the help of demonstration kits.



Youth Day celebration 11/04/2022

Different activities were conducted like poster competition and group discussion in the celebration of youth day. In judge panel Smt. Manjiri Datar and Smt. Chandarani Pophale monitored all activities and gave valuable tips needed for personality development.

Second year students showed their enthusiasm during the whole program. Also third year students led the whole program very nicely.



Two Day workshop on “Emotional Well-being and Professional Excellence”



Our department had arranged Two Days Faculty Development Program in Offline mode on Emotional Well-Being and professional Excellence. On 25th April and 26th April 2022. This workshop was conducted by two experts in this field Mr Vinay Gosavi and Dr. LeeAna Sane.

A blending of academic (cognitive), behavioral (action) and affective (emotional) dimensions are needed to address the complex issues facing. Emotional wellness is a major component of an educator's daily life because it affects interactions with students, parents, colleagues, and admins.

This program was designed to enhance emotional wellness and professional excellence of teachers.

- Emotional intelligence
- Presentation skills, and Effective body language
- Innovative teaching skills
- Stress management ,Conflict management
- Time management & team spirit

PCB Designing Workshop organized on 25 and 26 April 2022



PCB Designing workshop was conducted on 25th and 26th April 2022 for students as the new generation technology demands constructive basic knowledge of the hardware. Mr. P H Tarange and Mr. Aniket Khandekar guided students with theory as well as demonstration. Hands on given to students because practice is the key for perfection.

Third Year Parents Meet 30/04/2022



Parents meet was organized on 30 April 2022 by the department for third year students and their parents. Our Hon HOD Dr. R.K.Sawant and Prof. D.K.Lamtare guided parents about the purpose of the meeting. All class teachers gave their inputs about the progress of the students. After a long duration of online classes, now students are in offline mode and hence parents are requested to monitor the progress of students regularly. Our beloved principal Dr.D.M.Garge sir guided and motivated parents to make students successful as a good human being. All academic toppers are felicitated by Hon Principal and Hon HODs. Finally parents also meet personally to staff at the end of meeting to ask their questions and also suggested some inputs. One register is circulated among parents and their written feedback and suggestions are taken.

Parents Meet Second Year students 30/04/2022



To make aware parents about the progress of students a grand parents meet was arranged for second year students and their parents. As parents are always keen to know the progress of their child ,such meetings act as a bridge between institute and parents/guardians. After a long gap of COVID 19 students appeared in offline mode and due to this staff as well as parent-students were also excited for this interaction. First all parents were welcomed by Hon. Principal and Hon. HODs and then teaching staff guided parents about activities conducted in the department and discipline expected from students.

Industrial Visit MF Radar station

Industrial visit is an important part of the diploma education system. Under the guidance of Prof. V S Waydande, Prof. P V Itkalkar and Prof. A S Shival. Students visited MF Radar station on 05 May 2022. Different aspects of Radar system were explained by the expertise available in the Radar station.



Now a days uninterruptable power supply is the demand of any industry and it is the sign of advanced country when considered industrial growth. To cater the demand in Kolhapur district Renutron industry is working in the manufacturing of inverters. Under the guidance of Mr. V S Waydande, Mr. P V Itkalkar and Smt. A P Rathod student visited Renutron Industries Kolhapur on 07 May 2022. The working principle, PCB designing component mounting and applications of UPS for different power rating were explained by the expert of the Renutron

Industrial Visit MIDC Shirol

Practical knowledge is an important aspect for polytechnic students and that is why industrial visits are necessary part of the program. One such visit was arranged for TYIE students to United System and Control MIDC Shirole.

United systems and controls is one reputed name in electronics industry zone of Kolhapur. Students asked various questions about the technical parts shown to them.



Industrial Visit to BSNL Kolhapur on 04 June 2022. This visit gives exposure to third year students about mobile communication and emerging trends in the field of telecommunication.

On account of National Science day Electronics Engineering Students Association (EESA) has organised a **Science Day Quiz** on 01/03/2022 to brush up the knowledge of students

Send off to third year students



A grand send off was arranged for 2021-22 batch by the department. Toppers were felicitated by Hon Principal Dr. D M Garge. Our beloved principal Dr. D M Garge addressed students about different options after completion of diploma program. Also he told students about importance of being a good human being. EESA certificates were also awarded to students for their achievement in different competitions.

Women's Day celebration on 08/03/2022

On account of International Women's day Electronics Engineering Students Association (EESA) had organised a one day program. On 08/03/2022

The program events were:

- 1) Self Defence
- 2) Speech/Elocution
- 3) Sketch
- 4) Debate

Also all the ladies staff members were felicitated by HODs and Lecturers.





Future of SCADA System

Name: Neel Madhav Joshi

Class: TYIE

Supervisory Control and Data Acquisition (SCADA) system was being used in industries to control easily and simply. It is a computer control and a software application. This paper describes implementation of control unit to control the filling system with modelling design. It aims a manufacturing system using SCADA control system. It has been designed to work on the computer for the process. The main purpose of this paper is to implement the hardware components for the filling process and to interface between master station and control unit for controlling the data. Microcontroller and control circuits have been used for control unit.

I. INTRODUCTION

Using powerful technologies, based on experience of qualified personal, SCADA (Supervisory Control and Data Acquisition) applications are created as a main tool for performing management, required by technical reengineering of an industrial company. In modern manufacturing and industrial processes, mining industries, public and private utilities, leisure and security industries, control systems are often needed to connect equipment and systems separated by large distances. These systems are used to send commands, programs and receive monitoring information from these remote locations. SCADA refers to the combination of control systems and data acquisition. In the early days of data acquisition, relay logic was used to control production and plant systems. With the advent of the CPU (Central Process Unit) and other intelligent electronic devices, manufacturers incorporated digital electronics into relay logic equipment. The PLC (Programmable Logic Controller) is still one of the most widely used control systems in industry.

WHY SCADA?

DRAWBACK OF CONVENTIONAL SYSTEM

Conventional equipment systems are prone to errors due to the involvement of humans in the data collection and processing using complicated mathematical expressions. Thus what we require is a system that collects raw data, processes it and presents it in values which can be verified and compared with the standard values.

In the coding process of this implementation with micro-controller, it requires a fast and efficient processing which on the other part depends on the length and sub-routines of the coding process. Thus, it provides a real challenge with systems involving.

SCADA provides several unique features that make it a particularly good choice for many control problems. The features are as follows:

- the computer control primary equipment, record and store a very large amount of data from process
- the operator can incorporate real data simulations into the system
- the operator is assisting by computer that recommend actions to keep the system safety
- Many types of data can be collected from the RTUs (Remote Terminal Unit), this creates online the image of the system.

FUTURE SCOPE

- Flexible communication architecture
- Open and interoperable protocols, etc

Future of SCADA System

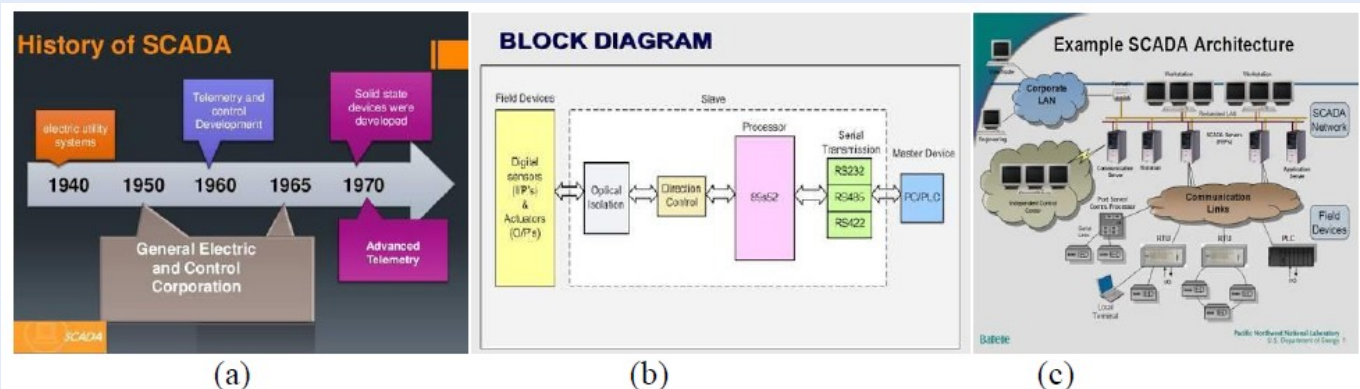
FLEXIBLE COMMUNICATION ARCHITECTURE

Current SCADA systems are essentially a centralized communication system, where the data server polls each remote terminal unit (RTU) to collect data. There is no data sharing and forwarding between different RTUs. Usually, these RTUs only communicate with the data server. This communication architecture is not flexible to interact with other systems, such as the embedded sensor networks and mobile users in the field. Designing flexible communication architecture is one of the key factors to enable interoperability and extensibility.

OPEN AND INTEROPERABLE PROTOCOLS

We suggest that SCADA systems should adopt the use of Internet technologies for networking, rather than proprietary or link-level approaches. Collect and manipulate different types of sensor data. It also includes how to discover and configure sensors. An open protocol should be extensible to support various types of sensors. These protocols should also address what types of data should be transmitted and to whom. For example, raw data are only sent to data server for archival. Status summaries will be sent to managers and engineers, while emergency safety alarms should be broadcast to all field operators.

II. AUTOMATION SECTOR



The automation of SCADA includes

- PLC
- ELECTRICAL CONTROL WITH LOGIC GATES
- MANUAL CONTROL

PLC

In this, instead of achieving desired control and automation through physical wiring of control devices, it is achieving through program say software.

ADVANTAGES

Reduced Space, Energy saving, Modular Replacement, Easy trouble shooting, Error diagnostics programmer, Economical, Greater life and reliability, The Compatibilities of PLC'S, Logic Control, PID control, Operator control, Signalling and listing, Coordination and communication.

ADVANTAGES :-

- Reduced space requirements, energy saving, less maintenance and hence greater relia.



Machine Learning

Name: Madhav Y Sonule

FY ENTC

Introduction :

Machine Learning (ML) is a sub-category of artificial intelligence that refers to the process by which computers develop pattern recognition, or the ability to continuously learn from and make predictions based on data, then make adjustments without being specifically programmed to do so. Whether or not you're excited by the idea of artificial neural networks one day growing sophisticated enough to replicate human consciousness, there are undeniable practical advantages to machine learning, namely:

Intelligent big data management – The sheer volume and variety of data being generated as humans and other environmental forces interact with technology would be impossible to process and draw insights from without the speed and sophistication of machine learning.

Smart devices – From wearable devices that track health and fitness goals to self-driving cars to "smart cities" with infrastructure that can automatically reduce wasted time and energy, the Internet of Things (IoT) holds great promise, and machine learning can help make sense of this significant increase in data.

How does machine learning work ?

Machine learning is incredibly complex and how it works varies depending on the task and the algorithm used to accomplish it. However, at its core, a machine learning model is a computer looking at data and identifying patterns, and then using those insights to complete its assigned task more effectively. Any task that relies upon a set of data points or rules can be automated using machine learning, even those more complex tasks such as responding to customer service calls and reviewing CVs.

Depending on the situation, machine learning algorithms function using more or less human intervention/reinforcement. The four major machine learning models are supervised learning, unsupervised learning, semi-supervised learning and reinforcement learning.

With supervised learning, the computer is provided with a labelled set of data that enables it to learn how to do a human task. This is the least complex model, as it attempts to replicate human learning.

With unsupervised learning, the computer is provided with unlabelled data and extracts previously unknown patterns/insights from it. There are many different ways that machine learning algorithms do this, including:

Clustering, in which the computer finds similar data points within a data set and groups them accordingly (creating "clusters").

Density estimation, in which the computer discovers insights by looking at how a data set is distributed.

Anomaly detection, is when the computer identifies data points within a data set that are significantly different from the rest of the data.

Machine Learning

Name: Madhav Y Sonule

FY ENTC

Continued...

Principal component analysis (PCA), in which the computer analyses a data set and summarises it so that it can be used to make accurate predictions.

With semi-supervised learning, the computer is provided with a set of partially labelled data and performs its task using the labelled data to understand the parameters for interpreting the unlabelled data.

With reinforcement learning, the computer observes its environment and uses that data to identify the ideal behaviour that will minimize risk and/or maximize reward. This is an iterative approach that requires some kind of reinforcement signal to help the computer better identify its best action.

Machine Learning Life Cycle:





Evolution of Electronics

Name: Prasad Waychal

Class: TYETB

Electronics is the branch of physics and electrical engineering that deals with the emission, behaviour, and effects of electrons and with electronic devices.

The flow of electron which we call electric current, after flowing through different substances results in different phenomena which combined can help form electronic circuit components designed for specific applications. Ultimately, after assembling them in specific design according to the desired result and thus, we can create a circuit which can be found in daily electronic appliances embedded within.

Apart from analog part we have digital electronics which comprises of merely 2 states of action which is either on or off technically termed as HIGH or LOW which gave birth to different logic gates. These gates were implemented on different scales for performing different desired outputs. The microprocessor or integrated circuit are also created using implementation of huge number of electronic components using these gates.

Similarly, computing emerged with Binary as machine language which had 0s and 1s in bit just like the logics in electronics.

After recent technology trends, we would see rise of new type of computing termed as quantum computing which can harness

can harness the phenomena of quantum mechanics, such as superposition, interference, and entanglement. Though current quantum computers are too small to outperform usual (classical) computers for practical applications, larger realizations are believed to be capable of solving certain computational problems and being substantially faster than classical computers.

As the technology evolves we are to experience better trends from these fields which will improve the lifestyles of people.

My car won't start after I buy vanilla ice cream! HELP ME FIGURE OUT WHY.

The story supposedly involves “Fred” complaining to Ford Headquarters that his car won't start whenever he buys vanilla ice cream. Let's hear from Fred:

“We have a family tradition of sending me out to buy ice cream after dinner each night. We vote on what kind of ice cream we should have, then I drive two miles to the store to get it. But every time I buy vanilla ice-cream, my new Ford won't start. If I get any other of ice cream, the car starts just fine. Please explain why my car is allergic to vanilla ice cream?”

What's going on? Now, dear reader, think about it for a moment. What do you think the reason is? What's your working hypothesis as to why his car won't start?

What additional information would you need to be sure?

Ford asked Fred to repeat his ice cream visits but to carefully capture data concerning time of day, type of gas used, outside temperature, time it takes to purchase, drive time back and forth, flavour selected, and whether the car started or not.

Scrunching the data provided a clue: It always took Fred less time to buy vanilla than any other flavour. With that additional insight, what's your new working hypothesis about the root cause of the problem?

Ford then sent an engineer to the store to investigate further. The engineer studied the store layout, noting that vanilla, being the most popular flavour, was placed in a separate case at the front of the store for quick pick up.

All the other flavours were kept in the back of the store at a different counter where it took considerably longer to get served. It was clear that now the issue was why the car wouldn't start when buying ice cream took less time. Once time became the key variable—not the flavour of ice cream – the solution became apparent: vapour lock.

Before cars had fuel injection, when a car was shut off, it needed time to cool down before it would restart. This happened to his car every night but because Fred got vanilla more quickly, the engine was still too hot for the vapour lock to dissipate. But the extra time needed to get the fancy flavours allowed the engine to cool down sufficiently to start. Problem solved.

Lesson Learned: If your initial interpretation of the solution to a problem doesn't make logical sense, search for alternative solutions. Refine and test your initial, dig deeper, get data.

Don't confuse correlation with causation. Just because buying vanilla correlated with a stalled car that was not the causative factor. The rooster crowing in the morning doesn't cause the sun to rise, though it may like to think it does.

Be strategic and intelligent about discovering root causes. And be assured that your car should start regardless of what ice-cream flavour you are hungry for.



Collection by: P V Itkalkar



ENTC First shift Toppers



Third Year			
Rank	Name of the Student	Percentage %	Year
1	KOTHAVLE ASAVARI UDAY	92.62	21-22
2	MANE NEHA PRAKASH	88.62	21-22
3	SALOKHE SAMRUDDHI	88.06	21-22
4			

Second Year			
Rank	Name of the Student	Percentage %	Year
1	HEMADDY ARJUN CHAITANYA	97.62	21-22
2	SAWANT SNEHA PANDURANG	96.5	21-22
3	PATIL RUJUTA RAGHUNATH	92.87	21-22

First Year			
Rank	Name of the Student	Percentage %	Year
1	KUMBHAR SOHAM SUNIL	94.76	21-22
2	GAIKWAD PRATIK VIKAS	92.61	21-22
3	PATIL SATEJ BALCHANDRA	88.46	21-22





ENTC Second shift Toppers



Third Year

Rank	Name of the Student	Percentage %	Year
1	WAYCHAL PRASAD MAHESH	94.68	2022
2	CHAVAN ABHISHEK UDAY	86.18	2022
3	PISE PARAM RANJEET	83.62	2022

Second Year

Rank	Name of the Student	Percentage %	Year
1	SHELKE RITESH RAMCHANDRA	85.37	2022
2	NARALE KAJAL BABAN	84.37	2022
3	RANE DHEERAJ DNYANDEV	80.37	2022

IE Third Year Toppers

Third Year

Rank	Name of the Student	Percentage %	Year
1	NEEL MADHAV JOSHI	89.25	2022
2	SHINDE HERAMB DILIP	88.43	2022
3	PATIL SWAPNIL MARUTI	84.12	2022

Second Year

Rank	Name of the Student	Percentage %	Year
1	NALAWADE PRATHAMESH SANTOSH	89.29	2022
2	VAISHNAVI KISHOR SURYA-WANSHI PATIL	81.29	2022
3	VARUTE SOMESH GANESH	78.19	2022





Industrial Electronics Toppers



GOVERNMENT POLYTECHNIC KOLHAPUR

(An Autonomous Institute of Government of Maharashtra)

Industrial Electronics and Electronics & Telecommunication Department

EESA COMMITTEE 2021-22

<i>Sr. No.</i>	<i>Post</i>	<i>Name</i>	<i>Class</i>
1	President	Abhishek Uday Chavan	TY ETB
2	Vice President	Diksha Jogindar More	SY ETA
3	Treasurer	Viraj Vinod Raykar	SY ETB
4	Technical Head	Prasad Mahesh Waychal	TY ETB
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Achievement

Student of the Year 2021-22

Prasad Waychal



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"Just for Laugh"

