KUMARAGURU
Institutions

ECE
DEPARTMENT ASSOCIATION

MONTHLY MAGAZINE
JANUARY 2023

PREPARED BY
ASSOCIATION OF ECE

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DEPARTMENT OF ECE

VISION

To be a centre of repute for learning and research with internationally accredited curriculum, state-of-the-art infrastructure and laboratories to enable the students to succeed in globally competitive environments in academics and industry.

MISSION

The Department is committed to:

- Motivate students to develop professional ethics, self confidence and leadership quality.
- Facilitate the students to acquire knowledge and skills innovatively to meet evolving global challenges and societal needs.
- Achieve excellence in academics, core engineering and research.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

Graduates of the Electronics and Communication Engineering Programme will have the ability to:

PSO1: Analyze and Design, verify and validate VLSI Systems by selecting appropriate hardware and software tools.

PSO2: Design, develop and validate inter disciplinary products/ process by applying the knowledge and skills of Embedded Systems, Signal Processing, Electromagnetics and Communication Engineering.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

The Programme Educational Objectives of Electronics and Communication Engineering Undergraduate Programme are:

PEO1: Graduates will be successful as Professionals, Researchers or Entrepreneurs in Electronics, Information and Communication Engineering disciplines.

PEO2: Graduates will continuously be updated with the state-of the art technology through formal and informal education to provide sustainable solutions.

PEO3: Graduates will demonstrate ethical and social responsibilities as an individual and in a team of diverse culture.

PROGRAMME OUTCOMES (POs)

PO1: The graduates would be able to apply the knowledge of mathematics, sciences, engineering fundamentals and skills to solve problems in electronics and communication.

PO2: The graduates would acquire skills to analyse complex problems in the domain of electronics and communication engineering.

PO3: The graduates would be able to design, develop and validate solutions for electronics and communication systems meeting the specifications vis-à-vis the society.

PO4: The graduates will have proficiency to acquire, analyse data and interpret results leading to relevant research.

PO5: The graduates would be able to use appropriate modern engineering/simulation tools including modelling and forecasting for complex technological entities.

PO6: The graduates would have awareness of and the need to uphold professional responsibilities and also be aware of health, safety, social and legal aspects of their work.

PO7: The graduates would have an understanding of the societal and human context in which their engineering contributions will provide sustainable development.

PO8: The graduates would carry out professional responsibilities adhering to ethical and standard norms of engineering practices.

PO9: The graduates would have ability to function effectively as an individual and as a member or leader in diverse teams and in multi-disciplinary environment.

PO10: The graduates would be capable of communicating effectively with the engineering community and society at large.

PO11: The graduates would demonstrate knowledge and understanding of engineering and management principles for technological and socially relevant projects.

PO12: The graduates would recognize the need for and also have ability to engage in continual, life-long learning.

SWEARING-IN CEREMONY

"Our ECE department is honored to welcome our new HOD Dr.M.Bharathi. We feel immense pleasure in having you as a part of our family."

HOD - ECE

Dr. M. Bharathi is enthusiastic and sincere teaching professional who strives to achieve excellence in her professional life. She enjoys facilitating students to excel in their academics. Her doctoral thesis on "Performance Estimation of DSL using Single Ended Loop Testing" at Visveswaraya Technological University in the year 2014 led to an Indian patent. Having 21 years of teaching experience, she has published 50+ research articles in International journals and Conferences.

23 JAN 2023

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SWEARING-IN CEREMONY

The greatness of a community is most accurately measured by the compassionate actions of its members, and we assure that our association will turn into a greatest one.

OFFICE BEARERS 2022-23

PRESIDENT	VICE PRISEDENT	TREASURER
SRI SUVETHA C S	RASHMI S	VIJAI SHREE S

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AKSHAYA C V	RITHIKA S M	HARINE M S

SECRETARY	SECRETARY	JOINT TREASURER
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JOINT SECRETARY	JOINT SECRETARY	JOINT SECRETARY
ASVIKA A P	SIBI VARSHITH S	SANJEEV KUMAR S

PLACEMENT	HIGHER STUDIES	EXTRACURRICULAR	INNOVATION
LINGANIVETH S G	KRISHNA KRUPA U R	DHANUSHA T	APARNA V
ASVIKA A P	NESHIKA R	MIRUDULAA ROSE K S	MAYIL RAJA S
NAVIPREETHI S	AHMED ZINTHA A	MONAJ S	PRANESH S
JANANI J	SIBI VARSHITH S	THRISHA C	ABHARNAA M R

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KEERTHANA R	SAKTHI DEVI S	ALDRICK PETER T	THENDAARNIKA G S
SWETHA T	VARSHINI M	SWETHA S	BAVITHRA R
SHAMSUNDAR S	SHARNI J	SANJEEV KUMAR S	NISHANTHAN M
VARSHINI K A S	AKSHAYA C		PAVITHRA N

MAGAZINE	DOCUMENTATION	TECHNICAL	PROFESSIONAL BODY
THARUN RAJ G	VARSHINI PALANI KUMAR	BANU PRIYA S	AKASH S
ABIRAMI R	ARUN N	JENESHA P	RIYAS S
REESARI R	SAKTHIKA P	KIRUTHIKA V M	NANDHAKISHORE M
SARAVANAN M			SREENITHI S

DA ACTIVITIES

SOCIAL ACTIVITIES:

THEME : Alive pulse
DATE : 21/01/2023
DAY : Saturday
PLATFORM : Orb
ORGANIZER : Nishanthan M

ENTREPRENEURSHIP:

THEME : Entrepreneurship
development cell [EDC]
DATE : 23/01/2023
DAY : Monday
PLATFORM : C block,seminar hall
ORGANIZER : Pratigya S

PLACEMENT:

THEME : F40 session on core platform
DATE : 28/01/2023
DAY : Saturday
PLATFORM : MS teams
ORGANIZER : Linganiveth S G

EXTRACURRICUALR:

THEME :Pattern of rebellion
DATE : 26/01/2023
DAY : Saturday
PLATFORM : MS teams
ORGANIZER : Manoj .S

GENERAL AND TECH UPDATES

INSPIRATIONAL STORY

RATAN TATA

Ratan Naval Tata (born 28 December 1937) is an Indian industrialist and former chairman of Tata Sons. He was also the chairman of the Tata Group from 1990 to 2012. Ratan Tata was promoted to management during the 1970s in the Tata group of industries. With a confident mind, He worked with Tata Motors and Tata steel before being appointed as the Tata industry Chairman in 1991.

By his genius mind, Tata Group acquired multiple overseas brands to expand its reach. Tata acquired Tetley in 2000 for 407 million$ and Commercial Vehicles in 2004 for 102 million$. In 2007, Ratan Tata acquired Corus, for 12.2 billion dollars. With his leadership, tata become fifth largest steel maker in world.

He served Tata group for nearly 50 years. At 75, he retired from Chairmanship of Tata Group in 2012. During tata period, revenue of tata groups grew up 40 times. He received Padma Bhushan in 2000 and Padma Vibhushan, in 2008.

"I don't believe in taking right decisions. I take decisions and then make it right."
~ Ratan Tata

Microsoft will stop selling Windows 10 on January 31, but workarounds remain

Microsoft will stop selling downloadable licenses for Windows 10 on its website on January 31, according to a message on the product pages for Windows 10 Home and Pro. Although Windows 10 will continue to be supported with new security updates until at least October 2025. Even if all Windows 10 sales went away at the end of the month, people who really wanted it should still be able to get it.

For owners of older Windows 7 and Windows 8 PCs who want to upgrade—and you should, since both operating systems received their final regularly scheduled security updates earlier this month. Microsoft is still releasing yearly feature updates for Windows 10, though the 22H2 update contained few, if any, major new features.

Samsung Galaxy S23 might be able to survive a waist-high drop

Surprising no one, Samsung's next phones will be the first to use Corning's Gorilla Glass Victus 2. Like I told you in November, Corning says its new cover class should be able to survive a one-meter drop on concrete, one of the more difficult landings for a phone because of all those jagged bumps. (The original Gorilla Glass Victus from 2020 claimed to be able to survive two-meter drops, but only on smoother asphalt; Victus 2 can do that as well).

Audi's latest concept car is a luxury coupe that transforms into a truck: The Activesphere

The latest is the Activesphere, an extremely sleek-looking electric luxury coupe that can transform into a pickup truck with off-roading capabilities. With some truly impressive ground clearance, big 22-inch wheels, and a hatchback that can transform into an open cargo bed at the touch of a button, the Activesphere is described as Audi's most versatile concept.

The Active sphere isn't just a design experiment it also sits atop a modular electric drive platform that Audi is developing in collaboration with sister company Porsche.

The vehicle will include 800-volt architecture to enable fast charging, similar to the Audi E-Tron GT Quattro. That means gaining as much as 300 kilometres with just 10 minutes of charging. The vehicle's ground clearance is adjustable by as much as 40 mm from the basic height of 208 mm. It can also be lowered by the same amount when driving on-road. The first was the Skysphere, a sleek, villainous-looking electric convertible with an adjustable chassis. Next was the Grandsphere, a spacious electric sedan with an interior that looks like it was designed by a Kardashian. And the third was the Urbansphere, a humungous autonomous people-mover for traffic-dense megacities.

MusicLM: Google's new AI tool can turn text, whistling and humming into actual music

Google researchers have made an AI that can generate minutes-long musical pieces from text prompts, and can even transform a whistled or hummed melody into other instruments. at some point, but for now, the only people who will be able to make use of the research are other people building musical AI systems. Google says it's publicly releasing a dataset with around 5,500 music-text pairs, which could help when training and evaluating other musical AIso. This mainly developed for a text-to-music AI that creates songs that can last as long as five minutes.

Elon Musk 'doesn't seem like' right person to own Twitter,by Biz Stone Co-founder

Elon Musk "doesn't seem like" the right person to own Twitter, the social media platform's co-founder has said. In an interview with the Guardian, Biz Stone said positive changes he had helped oversee in recent years had been unwound by the Tesla chief executive. Elon Musk doesn't seem like the right person to own Twitter, Stone co-founded Twitter in 2006 with Jack Dorsey, Noah Glass and Evan Williams. Musk has recently changed his handle to Mr Tweet. BizStone also added that Elon Musk reversed all the changes I made in Twitter.

A new revolution 5G set to make waves in 2023

The 5G era is finally here, and the new year will see a lot of use cases in various fields and people utilising the benefits of the technology. Also, India will be one of the first countries where 5G will be used more by consumers than enterprises.

One of the main reasons for end consumers using more of 5G services in India, unlike any other country, is that India still has the cheapest data tariffs and 5G smartphones are also comparatively cheaper than several other countries.

According to Kochhar, 5G network technology is expected to contribute about two percent to India's GDP, amounting to $180 billion by 2030 and aslo, 5G subscribers in India are expected to reach around 690 million by the end of 2028, and urban areas are likely to have 5G services available for public consumption by March this year.

5G-specific tariff plans are expected to emerge in India in the next 3-4 months. With the advent of 5G, truly unlimited plans are making a comeback globally, as these are popular with 5G users.

Rocket Lab set to try its first US-based launch again

Rocket Lab will try again to send its first payloads to orbit from the Mid-Atlantic Regional Spaceport (MARS) in Virginia. With clear skies and a launch window that opens after sunset, the launch has the potential to be visible on most of the Eastern Seaboard and as far west as Ohio.

While Rocket Lab's Electron launch vehicle has a solid track record of launches from New Zealand, the use of Virginia would represent a big step forward for both the company and MARS itself. Having a US-based launch site allows the company to reach trajectories and opens up opportunities for US government work, some of which require launches from within the country.

Rocket Lab would represent its second major commercial customer. NASA operates small sounding rockets from the site, and Orbital ATK has flown resupply missions to the International Space Station from there. Perhaps more significantly, Rocket Lab is using Wallops for the development of its larger reusable Neutron rocket, which would both launch and land at MARS.

Google employees who survived layoffs are worried, ask top bosses if their job is safe

Google axed 12000 job a few days ago. CEO Sundar Pichai took full responsibility for layoffs and apologised to all impacted employees. The tech giant, at the time of announcing layoffs, said that it will provide full support to 12000 impacted employees. While 6 per cent of Google's workforce is leaving the firm, the remaining employees are worried. Layoff survivors are concerned about their job security.

Last month, Google's parent company Alphabet announced Sundar Pichai getting a massive hike in salary. The board recognised Pichai's "strong performance" as CEO and said that the vesting of a significant chunk of the award would depend on Alphabet's total shareholder return relative to other S&P 100 companies. As of 2020, according to a filing, Google paid $2 million as salary to Pichai annually. According to the IIFL Hurun India Rich List 2022, Google CEO's net worth fell 20 per cent to Rs 5,300 crore but he is still amongst the top richest professional managers globally.

Over 21,000 techies working for Indian startups fired, many more to lose jobs soon

As many as 21,000 techies lost their jobs in the last 3-4 months, reports suggest. And this isn't the end of it. Many more people are likely to be impacted by the wave of layoffs in the coming months amidst the deepening funding winter.

As many as 21,000 techies lost their jobs in the last 3-4 months, reports suggest. On January 16, ShareChat, a Google-backed company, announced layoffs and made headlines. Dunzo also announced its decision to fire around 3 per cent of its workforce.

More than 70 startups have slashed job roles in recent months. Even the startups considered to be unicorns, like BYJU'S, OLA, OYO and Unacademy, among others, gave the pink slip to some of their employees.

CEO Mark Zuckerberg puts managers on notice, more Facebook layoffs likely

Right after Elon Musk fired thousands of Twitter employees, Meta CEO Mark Zuckerberg laid off 11,000 employees. It now appears that more employees at Meta are going to lose jobs soon. According to a recent report, Zuckerberg has put some middle managers on notice. That hints at more layoffs coming at the tech company very soon.

- Last year, Meta fired 11,000 employees.
- Mark Zuckerberg blamed macroeconomic conditions.
- Meta may fire more employees soon.

DO YOU KNOW?

∞

**The symbol for INFINITY
is called a LEMNISCATE.**

ACCEPTABLE OR
UNACCEPTABLE?

ChatGPT [AI]:

- **Writing mails, essays and many more.**
- **Search results based on previous searches.**
- **Different Contents.**

Suggesting contents, correcting mistakes and creative writings appreciable. But what if our brain stops doing this?!

en·gi·neer

[ˌenjəˈnir] *noun*

one who gets excited about things no one else cares about

HOTSPOTS:

- **A small change in Apple iPhone's privacy feature is threatening business model of social media companies.**
- **Small modular reactors that produce nuclear power are vastly underrated.**
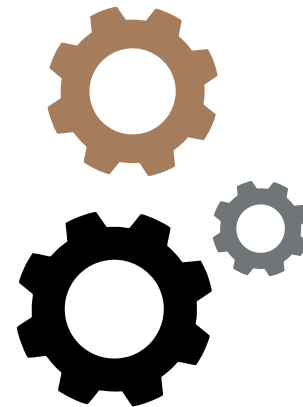- **Budgets 2023: Engineering sector wants help to become competitive against China.**

SOLVE IT!

FACT 1 : All chickens are birds.
FACT 2 : Some chicken are hens.
FACT 3 : Female birds lay eggs.

If the first three statements are facts, which of the following statements must also be a fact??

1. All birds lay eggs.
2. Hens are birds.
3. Some chickens are not hens.

- A. 2 only
- B. 2 and 3 only
- C. 1, 2, and 3
- D. None of the statements is a known fact

ANSWER.
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JOB OPPORTUNITIES::

- Circuit design,
- Wireless communications,
- Robotics,
- Electronics,
- Nanotechnology,
- Embedded Systems,
- Digital Electronics,
- Optical Communications

COMPANIES::

- Alstom Corporate,
- Bharat Heavy Electricals,
- Havells,
- Crompton Greaves,
- Neolex Cables,
- HBM Power Systems,
- Exide Industries,
- Siemens,
- BSNL,
- Sony Ericsson,
- Soliton Technologies,
- Reliance,
- Nokia and more

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