

DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING

A stylized logo consisting of two white wings with blue and purple highlights, flanking the word 'FUERZA' in a bold, white, sans-serif font. The wings are positioned as if they are part of a larger emblem or crest.

FUERZA

ASSOCIATION PRESENTS

The word 'INTELLECTUALIS' is written in a bold, white, sans-serif font. It is surrounded by a glowing blue and purple lightning bolt graphic that appears to strike through the letters, adding a sense of energy and technology.

INTELLECTUALIS

A glowing blue and purple globe with several orbital rings around it, set against a dark blue background with a circuit board pattern. The globe is the central focus of the lower half of the cover.

Volume 13
ISSUE 1
JUNE 2024

INDEX

- **Vision & Mission Of the Department**
- **PEOs & PSO**
- **Puzzles**
- **Technology Trends - 2023**
- **Riddles**
- **Students Achievements**
- **Events Organized By The Department**
- **Alumni Corner**

Hello Readers!

With an immense pleasure, we bring to you yet another successful edition of our department Newsletter - Intellectualis (Volume 13, Issue 1). In this edition, we present to you a wealth of knowledge, interesting research and thoughtful discourse on all that is exciting in the world of ECE. Most of all, this edition is a foray into the numerous exciting activities undertaken by both faculty as well as the students of our department and we are honoured to document them and present them to you. We hope you enjoy reading Intellectualis as much as we did creating it!

VISION OF THE DEPARTMENT:

To produce globally competent Electronics and Communication Engineers with a commitment to serve the society.

MISSION OF THE DEPARTMENT:

- 1.To establish a conducive learning environment to meet the demands of society.
- 2.To provide cutting-edge technical education to produce engineers with the highest calibre of professionalism.
- 3.To encourage creative thinking and support research to use technology to enhance people's quality of life.
- 4.To provide high quality, ethical engineers for the good of society.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS):

Within three to five years, our graduates of Electronics and Communication Engineering program are expected to

1. Apply their engineering abilities to resolve technological issues facing industry.
2. Analyze real-world issues and design systems that are suited for delivering technically sound, financially viable, and socially acceptable answers.
3. Contribute towards entrepreneurship, exhibit professionalism, ethical attitude, communication skills, team work in their profession and adapt to current trends by engaging in lifelong learning.

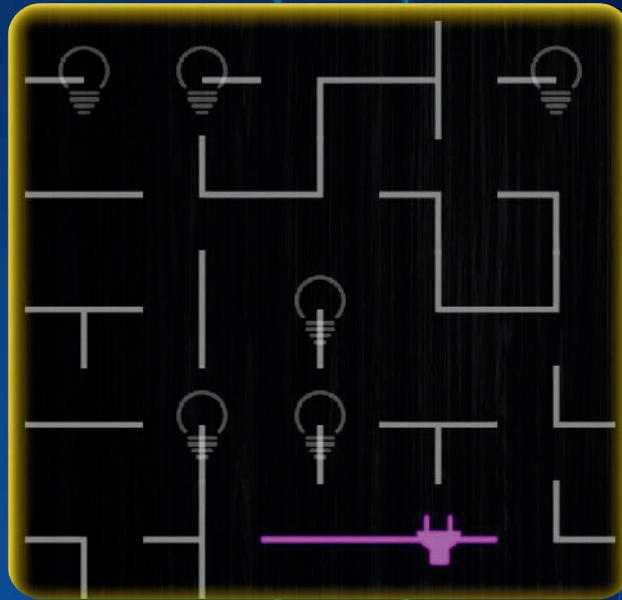
PROGRAM-SPECIFIC-OUTCOME (PSO):

Students of the Electronics and Communication Engineering Program

1. Shall have Potential to analyze, design, synthesize and provide technical solutions in the field of VLSI, Embedded Systems, Communication, Networking and Real Time Processing.
2. Shall exhibit leadership skills and pursue entrepreneurship and contribute in the field of Electronics and Communication Engineering.

PUZZLE:

Navigate the intricate circuit, where each path leads to illumination. With every connection, the switch brings light to the maze, unlocking the power within. Every turn challenges your precision, as the final connection reveals the glowing solution hidden in the dark.



?? RIDDLE 1:

1. Create lift by pushing air downward what am I?

- a.wing b.thruster c.rotor

2. I'm both a particle and a wave , a paradox in a box .what am I ?

3. I'm flexible and strong a polymer of wander , what am I ?

4. I beat but have no heart ,pump but have no blood ,what am I?

5. I'm a set of instructions a recipe for machines .what am I?

STUDENTS ACHIEVEMENTS

1. M.Krishna Murthi of Final year and S.Sibisaran, J.Karthikeyan, D.Shan, K.Vignesh, P.Vishnu Prasath, R.Sriram and P.Karthik of Third year participated in Khelo India Youth Games 2024 scheduled on 19 to January 31, 2024 held in Tamil Nadu.

2. D.Shan of Third year ECE have won Second place with cash award in Paper Presentation event (NEXUS 2K24) in Dr.M.G.R University on 15 February 2024.



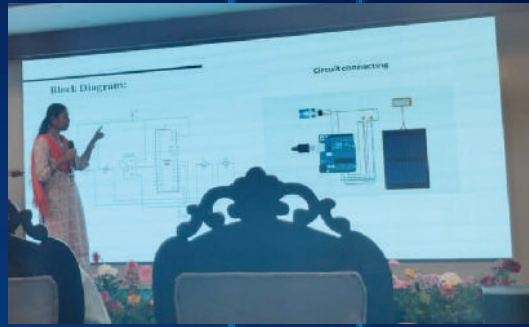
3. R. Helan, D.Shan, M.Induja and R.Keerthana of III Year ECE participated in Paper presentation event held at Vel Tech Institute of Science and Technology on 28 And 29 Feb 2024.



4. K.Sanjay, J.Bhavanath won First place in project exhibition event "Future Forge Expo" conducted by Kings Engineering College 5 March 2024.

5. T.Madhumitha, D.Princy, E.Tamilselvi, S.Gomathi, R.Priyadharshini, A.Victoriya of III-Year ECE had participated in Paper Presentation event (MEDINNO 2K24) in Kings Engineering College on 5 March 2024.

6. S.Pravina, K.Salini, A.Poul Louis of II Year ECE participated in Paper presentation event held at SRM Institute Of Science and Technology on 5 March 2024.



7. D.Shan of Third year ECE have won Second place with cash award in Paper Presentation event (MEDINNO 2K24) in Kings Engineering College on 5 March 2024.



8. D.SHAN III-Year ECE have won First place with cash award in Paper Presentation PAPTRIX - ELIXIR 2K24 conducted by Karpaga Vinayaga College of Engineering and Technology on 10/4/2024.

9. V.ALEX of Second year ECE have received Second prize in Project Exhibition PROCYON'24 held at Anand Institute of Higher Technology on 23 March 2024. Also, S.Bharath, N.Ruthresh, P.Vishnu Prasath, R.Yokesh of III-ECE participated in Paper Presentation event held at Anand Institute of Higher Technology on 23 March 2024.

10. D.Shan of third year ECE have won First prize with cash award in Paper presentation event at Anand Institute of. Higher Technology on 23 March 2024.



11. S.Bharath, N.Ruthresh, P.Vishnu Prasath, R.Yokesh, S.Balaji, G.Harikrishnan, B.Samuel of III Year ECE participated in Paper presentation event held at Tagore Engineering on 26 March 2024.

12. T.Madhumitha of Third year ECE received ISF Best Student Volunteer award 2023 from IETE Centre.



13. M.Dhanush of Second year has participated in Wildlife photography competition conducted by Arignar Anna Zoological Park, Vandalur. His photography was selected and posted in the zoo website.

14. M.Krishna Murthi of final year, D.Shan and K.Vignesh of third year ECE participated in Startup Mahakumbh (Biggest Showcase of Innovation) held on March 18-20, 2024, at Bharat Mandapam & ITPO, New Delhi, India.



15. 13 Students from our Department participated in Design Thinking Workshop of RUSA 2.0 Startup Cafe conducted by Centre for Entrepreneurship development(CED), Anna University, Chennai on 30/3/2024 to 31/3/2024.



16. Six students from our Department participated in the skilled Hackathon 2023-2024 organized by Bhumi in collaboration with GAINWELL Technologies held on 17 April 2024.



16. J.Sreemathi, II-Year ECE participated in workshop on Mastering IoT Technologies: A Comprehensive Workshop organized by Firechip Academy on 17 Feb 2024. She also participated in the Paper Presentation event organized by Alagappa College of Technology on 19 March 2024.



SUDOKU CRAZE: SHARPEN YOUR MIND, ONE GRID AT A TIME!

Sudoku is a logic-based number puzzle where players fill a 9x9 grid so that each row, column, and 3x3 subgrid contains all digits from 1 to 9 without repetition. It's a popular brain-teasing game that challenges problem-solving and critical thinking skills.

2						6	9	
	5				3			
1	7				9	4		5
		3		2	5		1	8
				4				
7	2		3	8		5		
5		2	6				4	1
			5				7	
	6	7						3

**Did
you
KNOW?**

Artificial Intelligence (AI): AI development started in the 1950s, and today, AI can outperform humans in specific tasks like pattern recognition, game strategies (such as Chess and Go), and even medical diagnostics.

FACULTY PUBLICATIONS:

Dr.M.Jasmin:

“Long Short-Term Memory (LSTM) Networks for Stock Market Prediction”, in International Conference on Computation, Automation and Knowledge Management (ICCAKM).

Dr.V.Mangaiyarkarasi:

1. “Mind Controlled Prosthetic ARM”, in 2024 International Conference on Communication, Computing and Internet of Things (IC3IoT).

2. “Cancer Chemoradiation Powered by Nanotechnology: Realizing the Full Potential of Radiotherapy with Gold NP-BM” in 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)

?? RIDDLE 2:

1. I control the flow of electricity acting acting as a switch .what am I?
2. I'm a square maze of black and white, encoding secrets out of sight what am I?
3. I'm a vehicle of the sky without wings, I can't fly what am I?
4. I'm a type of material that can store electrical energy in an electrostatic field .what am I?
5. I'm an electronic device that can apply or switch electronic signals what am I?

~~EVENTS ORGANIZED BY THE DEPARTMENT~~

1. A Motivational talk on “Today’s Youth, Tomorrow’s Successful Professionals” was Organized for II-YEAR Students on 19.01.2024. Ms.Maria Saranya, Manager, Image Creative Education, Chennai was invited as the speaker.



2. A Hands-on Training on “Advancements in IoT, AI & ML” by TESSOLVE Semiconductor Pvt. Ltd. was Organized for students and Faculties from 23.5.2024 to 25.5.2024.

3. A Value added course on Computer vision was organized for Third Year and Final Year students under TESSOLVE Semiconductor Pvt. Ltd held on 17/3/2024.



4. An Industrial visit was organized for Second Year and Third Year students to Ohmtronixs Technologies, Chennai on 17/4/2024.

5.The Department organized Guest Lecture on “Trends and career building in Semiconductor Industry”, hosted by Mr. N.R.Girish, Associate Manager, Embiot Technologies Pvt. Ltd, Chennai on 20.05.2024.



6. The Department organized a Project Contest for Second Year, Third Year and Final Year students on 10/5/2024.



7. A Faculty Development Program on Linear Integrated Circuits was organized by the Department 5/2/2024 to 10/2/2024.

8. The Department organized Workshop on "Stress management Technique" Dr. R. Balamaniandan, Associate Professor, SIMATS, Chennai, which was held from 04.06.2024 to 05.06.2024.

9. Department of ECE in association with IETE Students forum organized "International Conference on Communication, Computing and Electronics System" held on 04.05.2024. The session was handed by Prof. Anupama, Assistant Director International relations, SRM University, Prof. Ismail Zahraddeen Yakubur, Kano University, Nigeria, Prof. Amal Mohamad Jarkas, Tatus University, Syria and Prof. Arthi Gandhimathi, MD, IAEME Publication, Chennai. Nearly 50 Papers are received and presented in Hybrid mode.





10. The Department Association, Fuerza in Association with IETE Students forum organized “A National Level Technical Symposium-CRISPO-2K24” on 05.04.2024.



??
RIDDLE 3:

1. I store potential in chemical form ready to release when needed to perform. What am I?
2. I spread out light into a colourful band in optics , my principle is quite grand . What am I?
3. I include current without a direct touch , in transformers .I'm used very much . What am I?
4. I'm measured in Hertz but I'm not a sound , I can be high or low in signals, I'm found . What am I?
5. I work in a space so small , you can't see me at all; I'm the future of tech , incredibly spec . What am I?

ALUMNI-CORNER



Did
you
know?

Smartphone Power: Modern smartphones have more computing power than the computers used to send Apollo 11 astronauts to the Moon in 1969.

Our esteemed alumna, V. Rajakumari, from the 2013-2017 batch of our department, has achieved a remarkable milestone by being selected as a Visiting Scholar in the CEED Research Group at Purdue University, USA. Her academic excellence and dedication to research have also been recognized with the prestigious Best Paper Publication Award from the IEEE Madras Section for the year 2024. This achievement is a testament to her hard work and commitment to advancing her field, and we are immensely proud of her accomplishments.



We are proud to announce that R. Chitra, a distinguished alumna from the 2012 graduating batch, has been honored with the Best Alumni Award for the academic year 2023-2024. This prestigious recognition highlights her exceptional contributions and unwavering commitment to her field, as well as her continued engagement and support of our department. Her success serves as an inspiration to both current students and fellow alumni, showcasing the impact of dedication and excellence.

RIDDLES ANSWERS:

RIDDLE 1:

1. Wing
2. Photon
3. Rubber
4. Pacemaker
5. Code

RIDDLE 2:

1. Transistor
2. QR code
3. Helicopter
4. Capacitor
5. Transistor

RIDDLE 3:

1. Battery
2. Prism
3. An inductor
4. Frequency
5. Nanobot

SUDOKU-ANSWER:

2	3	4	1	5	8	6	9	7
9	5	6	4	7	3	1	8	2
1	7	8	2	6	9	4	3	5
6	4	3	9	2	5	7	1	8
8	1	5	7	4	6	3	2	9
7	2	9	3	8	1	5	6	4
5	9	2	6	3	7	8	4	1
3	8	1	5	9	4	2	7	6
4	6	7	8	1	2	9	5	3

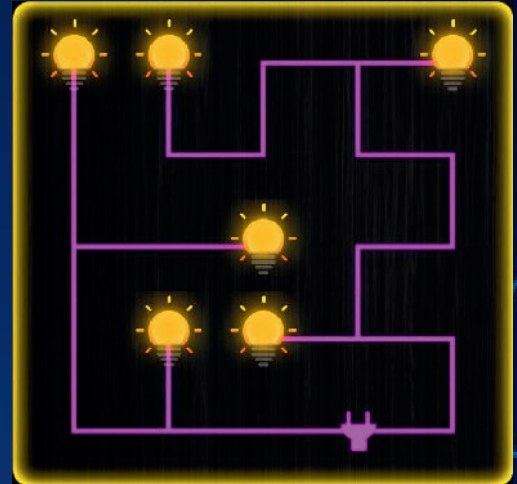
PATRON:

Dr M.JASMIN
Associate Professor/ECE

EDITORS:

J.BHAVANATH - IV ECE
J.KARTHIKEYAN - IV ECE ⚡

PUZZLE-ANSWER:



SUB - EDITORS:

K.SALINI - III ECE
U.HEMALATHA - II ECE

CONTENT CREATORS:

J.JAGADESH - IV ECE
V.BABU - III ECE

DESIGNERS:

K .VIGNESH - IV ECE
J.JAGADEESH - IV ECE

