TRANSEDGE

Dear Readers,

For years, "Trans-edge" has been the enthusiastic publication of the activities by the Technocrats of the ECE department. It aims to enlighten the readers on the various areas of technology that the faculty and the students have been associated with. It also aims to throw light on the latest technological innovations that inspire the young generation to explore the field. One such innovative technology is "*Spintronics*". Spintronics is a developing technology which improves the fundamental electronic charges of an electron. The idea of Spintronics was unveiled in 1980s by Johnson and Silsbee. In 2012, IBM scientists performed an experiment which results in **increasing the processor clock cycle**. This technology helps in higher data transfer speed, greater processing speed, improving memory density and storage capacity. It enhances the properties of electron spin for practical applications. Technologies of the like pique the curiosity and interest of students and help recognize how electronics drives innovation.

Dr.K.Murugesan,
Vice Principal (Admin) and
Head of the Department (ECE)

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The Editorial Team

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Ms.T.Gophika, Asst.Professor, ECE department

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- Ms.Rahavee.P   II   B
- Ms.Meghna   II   B
- Ms.Swetha   II   C

"Intelligence plus characterthat is the goal of true education." - **Martin Luther King Jr**.

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VISION AND MISSION

EASWARI ENGINEERING COLLEGE

Vision:

To accomplish and maintain international eminence and become a model institution for higher learning through dedicated development of minds, advancement of knowledge and professional application of skills to meet the global demands.

Mission:

M1:

Easwari Engineering College strives to set high standards of comprehensive education by developing the intellectual strength of students and guiding them towards technical advancement.

M2:

Synergize the efforts of various departments, inspire creativity and foster excellence and innovation in teaching and learning so as to realise our vision as a Premier Engineering Institution.

M3:

Nurture the development of mind, skill, attitude and core competence of students.

M4:

Attain leadership in planning and resource management so as to improve the quality and accessibility of technical education.

M5:

Produce graduates of International distinction, committed to Integrity, Professionalism and lifelong learning by widening their knowledge horizons in range and depth.

M6:

Enable students shine in their academic pursuits, making them sensitive to the needs of the progressive industrial world.

M7:

Organise a pluralistic and supportive environment that will stimulate scholars, students and staff of the highest caliber and contribute immensely to the process of Nation building through partnership with Community and Industry.

"Education is the most powerful weapon which you can use to change the world."- **Nelson Mandela**

VISION AND MISSION

EASWARI ENGINEERING COLLEGE

DEPARTMENT OF ELECTRONICS AND

COMMUNICATION ENGINEERING

Vision:

To prepare engineers, proficient to meet the needs of current technological advancements in the field of Electronics and Communication Engineering by establishing a learning environment consistent with industry standards in academics and research.

Mission:

M1:

To create a passion amongst students for contributing to research by providing industry oriented learning.

M2:

To impart in depth knowledge in principles and applications related to design and development of various systems for societal needs.

M3:

To build the skill sets, attitude and core competence of students and faculty by providing them with the opportunity to organize various technical events which will bring out their inherent talents

M4:

To produce graduates with technical expertise, professional attitude and ethical values

M5:

To instil creative thinking through innovative and team based methods which develops the entrepreneur skills, employability and research capability among professionals

M6:

To inculcate in the graduates, the thirst for life-long learning and guide them to obtain thorough knowledge in their chosen interdisciplinary field

"Don't judge each day by the harvest you reap but by the seeds that you plant." – Robert Louis

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PROGRAM EDUCATIONAL OBJECTIVES:

PEO1: Graduates will possess competency in mathematics, science and engineering fundamentals for solving Electronics and Communication engineering problems.

PEO2: Graduates will have core engineering knowledge necessary for employment in industries as well as higher studies and research.

PEO3: Graduates will attain organizing capability, entrepreneur skills and will be a team player in workplace with ethics.

PEO4: Graduates will perform effectively in multicultural and multidisciplinary environment and makes them ready for the corporate careers ahead.

PEO5: Graduates will have the ability to engage themselves in lifelong learning to achieve professional excellence that will make impact in the societal and human context.

PROGRAM SPECIFIC OUTCOMES:

PSO1: Design and construct Electronic circuits and to Simulate the circuits with software tools which lead to the development of Electronic gadgets.

PSO2: Design and analyze various signal processing blocks for Image and Signal processing systems.

PSO3: Analyze various Networking and Communication areas and its impact in real time applications.

PSO4: Implement their professional skills and techniques in the integrated circuit design which are applicable to industrial and societal needs.

"The mind is not a vessel to be filled, but a fire to be kindled."
-Plutarch

PROGRAM OUTCOMES:

PO1: Engineering Knowledge

PO2: Problem Analysis

PO3: Design/Development of Solutions

PO4: Conduct investigations of complex problems

PO5: Modern Tool Usage

PO6: The Engineer and Society

PO7: Environment and Sustainability

PO8: Ethics

PO9: Individual and Team Work

PO10: Communication

PO11: Project Management and Finance

PO12: Life Long Learning

PROGRAM OUTCOMES:

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/ Development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate considerations for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems: Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PROGRAM OUTCOMES:

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multi disciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation , make effective presentations, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to once own work as a member and leader in a team to manage projects and in multidisciplinary environments.

PO12 : Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

"The difference between a successful person and others is not a lack of strength, not a lack of knowledge, but rather a lack of will."

-Vince Lombardi

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EVENTS ATTENDED BY FACULTY

- Two days workshop on" IOT using Rasperry pi",for III year ECE students was organized on 24th and 25th January 2019. The session was handled by Mr.S.Veeravalavan BE.,R & D Engineer, Mr.Sakthianand ,M.E, Project Engineer and Mr.Karthik Aravind Han B.E., Project engineer. The organizers of the event were Mrs.K.Abirami and Mrs.N.Vidhyalakshmi of ECE department.

- Guest lecture on "Industrial instrumentation and communication", was organized by SECE forum of ECE department on 23rd January 2019.

"The best teacher is not the one who knows most but the one who is most capable of r e d u c i n g knowledge to that simple compound of the obvious and w o n d e r f u l ."
-H.L. Mencken

CAREER GUIDANCE PROGRAMME-IETE

The Career Guidance Programme for the students of X and XII class students was conducted by the IETE student forum of Easwari Engineering College on 25th January 2019 in Kovil Pillai Matriculation School at Rayala nagar, Ramapuram. The students were led by the respected coordinators, Dr.D.Jessintha and Ms.T.Gophika. The programme was utilised by the students in an efficient way which could be inferred from their feedback which was extremely positive. The programme started at about 12:30 at noon with a short interaction about career and the way one should choose theirs in life. The courses about which the students were unaware such as a wide range of engineering courses, diploma courses, medical courses, ITIs , vocational studies that they could opt for were projected and information about the available institutes to get were also discussed.

"Action is the foundational key to all success."

– Pablo Picasso

The programme was concluded by giving the vote of thanks to Dr.Alphonsa, Respected Principal of the Renowned School. The programme ended at about 1:30 pm peacefully.

Introduction about the career guidance program to the students

By faculty Co-ordinators

INDUSTRIAL VISITS

- An industrial visit to "The Cheyyar Co–op. Sugar Mills Ltd" for final year ECE students was organized on 28 th January 2019.

- An industrial visit to "EB Substation,ELCOT", was organized on 29th January 2019 for II year ECE C section , 30th January 2019 for II year ECE B   section and 31st January 2019 for II year ECE A section.

WORKSHOPS

DATE: 12.01.2018 - 13.01.2018

LOCATION: IIT Madras

S.NO	NAME	YEAR	SECTION
1.	Reshmika D	II	B
2.	Preethi Subusamy	II	B

DATE: 12.01.2018 - 13.01.2018

LOCATION: IIT Madras

DOMAIN: Ethical Hacking

"The youth need to be enabled to become job generators from job seekers."

-A. P. J. Abdul Kalam

S.NO	NAME	YEAR	SECTION
1.	Rahavee P	II	B
2.	Nethra M	II	B
3.	Nivetha M	II	B
4.	Lavanya J	II	B
5.	Manoj S	II	B

DATE: 24.1.2019– 25.1.2019

LOCATION: IIT-Madras

DOMAIN: Machine Learning

S.NO	NAME	YEAR	SECTION
1.	Lasya Ippagunta,	II	B

DATE: 24.01.2019 - 25.01.2019

LOCATION: Easwari Engineering College

DOMAIN: Raspberry Pi

S.NO	NAME	YEAR	SECTION
1.	Surya V	III	C
2.	Vasantha Varshini	III	C
3.	Sibisagar	III	C
4.	Vignesh Vijayaraghavan	III	C
5.	Vasantha Varshini	III	C
6.	Nikhitha	III	B
7.	Nidershana	III	B

8.	Suzhmitha.S.B	III	B
9.	Pooja	III	B
10.	Mehnaz	III	B
11.	Rohith Sai	III	B
12.	Manoj	III	B
13.	Pratyush	III	B
14.	Lokesh Kanna	III	B
15.	Rashmi	III	B
16	Keerthi	III	B
17	Rufus	III	B
18	Preethi	III	B
19	Lavanya	III	B
20	Rohith Krishnan	III	B
21	Madhushalini	III	B
22	Nivetha S	III	B
23	Sajitha	III	B

"Optimism is the faith that leads to achievement . Nothing can be done without hope and confidence."

- Helen keller

EVENTS PARTICIPATED

DATE: 25.01.2019

LOCATION: EASWARI ENGINEERING COLLEGE

EVENT: Photography competition by the weekend club

S.NO	NAME	YEAR	SECTION
1.	**Roshan V**	III	A

STUDENT'S CORNER

POETRY

BY: Ms.Meghna Singh, ECE-II-B

Teacher

Invincible you made me feel

Taught me to live with open eyes

Took me through dark to light

Let me experience the hardest lessons

But never left my side for all reasons

Let me glow even in the dark

Not letting the strobe lights leave a mark

Teaching me to live today, to fly tomorrow

To keep the fire alive for me to grow

Always saw me like a butterfly

'Coz they are meant to fly with beauty and sly

The reason for who I am now

So successful for everyone to ask 'How??'

The reason behind is a woman

That woman is no one ...

But my Teacher...

Go as far as you can see; when you get there you will be able to see the further
- *Thomas Carlyle*

Reach Us

THE DEPARTMENT OF ELECTRONICS AND COMMUNICATION ,ENGINEERING EASWARI ENGINEERING COLLEGE
Bharathi Salai, Ramapuram,
Chennai – 600 089.
Tamil Nadu , India .
Tel : 91 – 44 - 2249 0853, 2249 5420, 4392 3041.
E-mail : eecw@vsnl.com

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