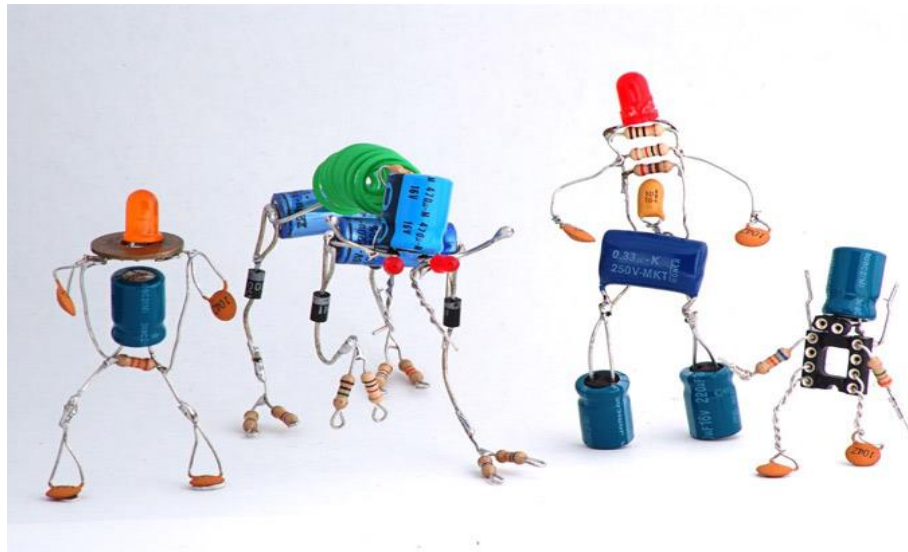


ELECTRONICS AND COMMUNICATION ENGINEERING

APRIL 2020



EASWARI ENGINEERING COLLEGE
Department Of Electronics and Communication
Engineering,
Bharathi Salai, Ramapuram,
Chennai – 600 089.
Tamil Nadu , India .
Tel : 91 – 44 – 2249 0853, 2249 5420
E-mail : hod.ece@eec.srmrmp.edu.in

College education is not the learning of facts, but the
training of the mind to think - Albert Einstein



“
Education is
the most **POWERFUL**
WEAPON
which *you* can use
to **change**
the **WORLD**.
”
-Nelson Mandela

“As engineers, we were
going to be in a position to
change the world – not just
study it.”

“Scientists study the world
as it is; engineers create the
world that has never been.”

Edited by,
S.SURUTHI, AP/ECE

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 instill 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

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.

Ann Makosinski is a 16-year-old student who competed against thousands of other young inventors from around the world to win first prize and a \$25,000 scholarship at Google's International Science Fair. She invented a battery-free flashlight. A free energy device that is powered by the heat in your hand....

FACULTY PARTICIPATION

- *Dr.B.Jesvin Veancy/Associate Professor* have participated in “Workshop on IPR” dated, 22.4.2020
- *K. Suriyakrishnaan/ AP* have participated in “ IPR Online workshop” dated, 22.4.2020
- *Dr. K. Rahimunnisa / Associate Professor* have participated in “Workshop on IPR” dated, 22.4.2020
- *A.Ponraj /AP* have participated in “Workshop on IPR” dated, 22.4.2020
- *R.Praveen Kumar /AP* have participated in “Internet of Things by NITTTR, Chandigarh” dated, 10.04.2020 to 14.04.2020
- *R.Praveen Kumar /AP* have participated in “Workshop on IPR” By SRM dated, 22.04.2020
- *R.Praveen Kumar/AP* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *R.Praveen Kumar/AP* have participated in “Short Term Courses on Teaching and Learning for Accreditation in Technical Education by NITTTR Chandigarh” dated, 27.04.2020 to 01.05.2020
- *R.Praveen Kumar/AP* have participated in “Two Week FDP on Managing Online Classes and Co-Creating MOOCs” Ramanujam University, Delhi dated, 20.04.2020 to 06.05.2020
- *R.Praveen Kumar/AP* have participated in “Workshop on how to write a Winning Project Proposals for Funding” dated, 29.04.2020
- *K. Suriyakrishnaan/AP* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *S. Caroline Jebakumari/A.P.* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *Gophika T / AP* have participated in “Workshop on IPR” dated, 22.04.2020
- *Gophika T / AP* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020

The inventions of Alessandro Volta have trademarked in electronics engineering, especially his battery that produced a reliable, steady current of electricity. This feat of Volta gave rise to electrochemistry, electromagnetism and the modern applications of electricity.

- *Gophika T/ Assistant Professor* have participated in FDP on "Recent trends in Biomedical Field Research Perspective" dated, 26.4.2020 to 30.4.2020
- *Gophika T/ Assistant Professor* have participated in Webinar on "Developing Thinking Abilities relevant for Engineering Education" dated, 28.04.2020
- *Gophika T/ Assistant Professor* have participated in "Online workshop on Project Proposal writing" dated, 29.4.2020
- *Bindu Babu/AP* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *Bindu Babu/AP* have participated in "Recent trends in Biomedical Field Research Perspective". dated, 26.04.2020 to 30.04.2020
- *Bindu Babu/AP* have participated in "Project Proposal Writing" dated, 29.04.2020
- *Bindu Babu/AP* have participated in "Image & Embedded processing" dated, 27.04.2020 to 01.05.2020
- *Dr.S.Sudha/Prof* have participated in "Workshop on IPR" dated, 22.04.2020
- *Dr.S.Sudha/Prof* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *Dr.B.Jesvin Veancy/Associate Professor* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *Dr.D.Jessintha/Associate Professor* have participated in "Workshop on IPR dated", 22.04.2020
- *Dr.D.Jessintha/Associate Professor* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *Dr.D.Jessintha/Associate Professor* have participated in "Latest Wireless and Computing Technologies by NITTTR, Chandigarh" dated, 14.04.2020 to 18.04.2020

Hans Christian Ørsted is attributed to be the originator of the connection between electricity and magnetism. His accidental discovery proved that an electric current produces a circular magnetic field as it flows through a wire, and the findings stirred much research into electrodynamics.

- *Mrs. A. Usha/Associate Professor* have participated in Workshop on "Intellectual Property Rights", "How to Write an Effective Research Paper for Peer Reviewed Journals", Paper writing. dated, 22.4.2020,24.4.2020
- *Mrs. A. Usha/Associate Professor* have participated in Online Lecture Series from NPTEL -by experts on "Joy of Teaching", "Time Management", "Entrepreneurship- What you should know before you take the plunge" dated, 17.04.2020, 19.4.2020,20.4.2020
- *Mrs. A. Usha/Associate Professor* have participated in “Two Week FDP on Managing Online Classes and Co-Creating MOOCs Ramanujam University”, Delhi dated, 20.04.2020 to 06.05.2020
- *Mrs. A. Usha/Associate Professor* have participated in “AICTE-NITTT -Technology enabled learning and life long self learning” dated, 20.4.2020
- *Arivu Selvam.B /Assistant Professor* have participated in “Workshop on IPR” dated, 22.04.2020
- *Arivu Selvam.B /Assistant Professor* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *Arivu Selvam.B /Assistant Professor* have participated in FDP on "Recent trends in Biomedical Field Research Perspective" dated, 26.4.2020 to 30.4.2020
- *Arivu Selvam.B /Assistant Professor* have participated in Webinar on “ Developing Thinking Abilities relevant for Engineering Education” dated, 28.04.2020
- *Arivu Selvam.B /Assistant Professor* have participated in Workshop on how to write a Winning Project Prposals for Funding dated, 29.4.2020
- *Arivu Selvam.B /Assistant Professor* have participated in Webinar on "5G & AI: The Ingredients for Next Generation Wireless Innovation" dated, 29.4.2020
- *Dr. Resmi R. Nair/ASP* have participated in “Workshop on IPR” dated, 22.04.2020
- *R.Hema/ Assistant Professor* have participated in “Workshop on IPR dated”, 22.04.2020

A French mathematician and physicist, André-Marie Ampère is considered the first person to discover electromagnetism. Among his significant contributions is the Ampere's circuital law, which relates the integrated magnetic field around a closed loop to the electric current passing through the loop.

- *R.Hema/ Assistant Professor* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *P. Bini Palas / Assistant Professor* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *P. Bini Palas / Assistant Professor* have participated in STC on "Wellness and Stress Management during the Pandemic" - NITTTR Chandigarh dated, 27.04.2020 to 01.05.2020
- *P. Bini Palas / Assistant Professor* have participated in STC on "8051 Microcontroller and its Applications" - NITTTR Chandigarh dated, 27.04.2020 to 01.05.2020
- *P. Bini Palas / Assistant Professor* have participated in STC on "Image and Embedded Processing" NITTTR Chandigarh dated, 27.04.2020 to 01.05.2020
- *S. Uma Maheswari / Assistant Professor* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *S. Uma Maheswari / Assistant Professor* have participated in STC on "Wellness and Stress Management during the Pandemic" - NITTTR Chandigarh dated, 27.04.2020 to 01.05.2020
- *S. Uma Maheswari / Assistant Professor* have participated in STC on "8051 Microcontroller and its Applications" - NITTTR Chandigarh dated, 27.04.2020 to 01.05.2020
- *S. Uma Maheswari / Assistant Professor* have participated in STC on "Image and Embedded Processing" NITTTR Chandigarh dated, 27.04.2020 to 01.05.2020
- *Dr. K. Rahimunnisa / Associate Professor* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *Dr.R.Senthamizh Selvi/Associate Professor* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *S.Suruthi, Assistant Professor/ECE* have participated in Webinar on "Antenna Design & Validation using Altair FEKO" dated, 28.04.2020

Best known for his Ohm's Law, which implies that the current flow through a conductor is directly proportional to the potential difference (voltage) and inversely proportional to the resistance, Georg Simon Ohm had passionate work on the conductivity of metals and the behavior of electrical circuits.

- *S.Suruthi, Assistant Professor/ECE* have participated in FDP on "Developing **Thinking abilities** relevant for Engineering Education" dated, 28.4.2020
- *K.Abirami /AP* have participated in Workshop on "How to Write an Effective **Research** Paper for Peer Reviewed Journals" dated, 24.04.2020
- *K.Abirami/AP* have participated in Webinar on "How to get Published in a scientific Journal:From **Research** to Publication" dated, 27.4.2020
- *Dr.B.Jesvin Veancy/Associate Professor* have participated in FDP on "Recent trends in **Biomedical Field** Research Perspective" dated, 26.4.2020 to 30.4.2020
- *Dr. K. Rahimunnisa / Associate Professor* have participated in **Short Term Courses** on Teaching and Learning for Accreditation in Technical Education by NITTTR Chandigarh dated, 27.04.2020 to 01.05.2020
- *Dr.B.Jesvin Veancy/Associate Professor* have participated in Online workshop on" How to write a Winning **Project proposal** for funding" dated, 29.4.2020
- *Dr. K. Rahimunnisa / Associate Professor* have participated in Webinar on “ Developing **Thinking Abilities** relevant for Engineering Education” dated, 28.04.2020
- *Dr. K. Rahimunnisa / Associate Professor* have participated in Online workshop on" How to write a Winning **Project proposal** for funding" dated, 29.4.2020
- *Dr. Resmi R. Nair / Associate Professor* have participated in Webinar on “ Developing Thinking Abilities relevant for Engineering Education” dated, 28.04.2020
- *Dr. Resmi R. Nair/ Associate Professor* have participated in Online workshop on **Project Proposal** writing dated, 29.4.2020
- *Sriram S R/Assistant Professor* have participated in FDP on "How to Apply Online IEEE Conference Application to Organize **IEEE** International Conference" dated, 30.4.2020
- *K. Suriyakrishnaan/AP* have participated in FDP on "Recent trends in **Biomedical Field** Research Perspective" dated, 26.4.2020 to 30.4.2020

Now familiar to engineers as the unit of energy, Joule, or James Prescott Joule discovered the law of conservation of energy and an experiment that further led to the discovery of the first law of thermodynamics. He was an English physicist with established work on the relationship between mechanical work and heat transfer.

- *J.Gurumurthy/AP* have participated in Online workshop on "How to write a Winning Project proposal for funding" dated, 29.04.2020
- *S. Caroline Jebakumari/ Assistant Professor* have participated in Webinar on "Developing Thinking Abilities relevant for Engineering Education" dated, 28.04.2020
- *S. Caroline Jebakumari/ Assistant Professor* have participated in "Online workshop on Project Proposal writing" dated, 29.04.2020
- *K. Suriyakrishnan/AP* have participated in "Online workshop on Project Proposal writing" dated, 29.04.2020
- *S. Caroline Jebakumari/ Assistant Professor* have participated in STC on "Image and Embedded Processing" NITTTR Chandigarh dated, 27.04.2020 to 01.05.2020
- *K.Suriya / Assistant Professor* have participated in Workshop on "How to Write an Effective Research Paper for Peer Reviewed Journals" dated, 24.04.2020
- *K. Suriya/Assistant Professor* have participated in FDP on "Recent trends in Biomedical Field Research Perspective" dated, 26.04.2020 to 30.4.2020
- *B.Balan/Assistant Professor* have participated in "Online workshop on Project Proposal writing" dated, 29-04-2020
- *K.Abirami/AP* have participated in Webinar on "Developing Thinking Abilities relevant for Engineering Education" dated, 28.04.2020
- *Dr.B.Jesvin Veancy/Associate Professor* have participated in Faculty Development Programme on 3.4.3 and R organized by Spoken Tutorial Project, IIT Bombay remotely at Department of Information Technology, Easwari Engineering College, Chennai dated, 20.4.2020 to 30.4.2020
- *K.Abirami/AP* have participated in Online workshop on "How to write a Winning Project proposal for funding" dated, 29.4.2020
- *S.Suruthi, Assistant Professor/ECE* have participated in Online workshop on "How to write a Winning Project proposal for funding" dated, 29.04.2020

Michael Faraday demonstrated significant work in static electricity. He was the first to prove that the charge only resided on the exterior of a charged conductor had no influence on anything enclosed within a conductor. He laid the foundation of the classical field theory, and developed the first dynamo in the form of a copper disk rotated between the poles of a permanent magnet.

