

EDISON

Volume No. 01 June 2020

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ELECTRICAL AND ELECTRONICS ENGINEERING VISION

To become a front-runner in bringing out globally competent electrical and electronics engineers, innovators, researchers, and entrepreneurs and thereby contribute value to the knowledge-based economy and society.

MISSION

- ☐ To offer good quality Under-Graduate, Post-Graduate and Doctoral programmes in electrical and electronics engineering.
- ☐ To provide state-of-the-art resources that contribute to achieve excellence in teaching-learning, research and development activities.
- ☐ To bridge the gap between industry and academia by framing curricula and syllabi based on industrial and societal needs.
- ☐ To provide suitable forums to enhance the creative talents of students and faculty members.
- ☐ To enable students to develop skills to solve complex technological problems of current times and also provide a framework for promoting collaborative and multidisciplinary activities.
- ☐ To inculcate moral and ethical values among the faculty and students.

PROGRAMME EDUCATIONAL OBJECTIVES

The Electrical and Electronics Engineering programme of Sona College of Technology will prepare its graduates to,

I. Apply their knowledge and skills to provide

- solutions to electrical and electronics engineering problems in industry and governmental organizations or to enhance student learning in educational institutions.
- II. work as a team with a sense of ethics and professionalism and communicate effectively to manage cross-cultural and multidisciplinary teams.
- III. update their knowledge continuously through lifelong learning that contributes to personal and organizational growth.

PROGRAMME SPECIFIC OUTCOMES

On completion of the B.E. (Electrical and Electronics Engineering) degree the graduates will be able to,

- Apply the fundamental knowledge of mathematics, science, electrical and electronics engineering to analyse and solve the complex problems in electrical, electronics and allied interdisciplinary areas.
- Design, develop and implement electrical and electronics and allied interdisciplinary projects to meet the demands of industry and to provide solutions to the current real time problems.

PROGRAMME OUTCOMES

- a) Engineering knowledge: Apply knowledge of Mathematics, Science and Engineering to solve the complex problems in Electrical and Electronics Engineering.
- b) **Problem analysis:** Identify, formulate, design, analyze and implement an electrical and electronics system, component, or process to meet desired needs.
- c) **Design / development of solutions:** Design system components that meet economic, environmental, social, political, ethical, health and safety, and sustainability requirements.
- d) **Conduct investigations of complex problems:** Conduct investigations of complex
 engineering problems including design of
 experiments, analysis and interpretation of



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data, and synthesis of information to provide valid conclusions.

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- e) **Modern tool usage:** Construct, select and apply appropriate techniques, resources, and modern simulation tools to solve complex electrical and electronics circuits.
- f) **The engineer and society:** Apply contextual knowledge to assess social, health, safety and cultural issues and endure the consequent responsibilities relevant to professional engineering practice.
- g) **Environment and sustainability:** Utilize core engineering knowledge in a global, economic, environmental, and societal context for sustainable development.
- h) **Ethics:** Solve professional, legal and ethical issues pertaining to core engineering and its related fields.
- i) Individual and team work: Function effectively as a team member or a leader to accomplish a common goal in a multidisciplinary team.
- j) **Communication:** Communicate effectively in both verbal and written forms.
- k) Project management and finance: Apply knowledge of engineering and management principles to manage projects effectively in diverse environments as a member or leader of a team.
- Life-long learning: Engage in independent and lifelong learning for continued professional development.

Department Events



Department of EEE - EDISON students association organised a guest lecture on "Career aspects and opportunities for Electrical Engineers" for III Year students, by Mr.Navaneethan from Live Wire, Salem.





Department of Electrical and Electronics Engineering conducted EDISON 2020 on 29th January 2020. Both Technical and Non-Technical Events were conducted and exciting Prices were distributed for the participants.



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Department of Electrical and Electronics Engineering in association with The Institutions of Engineers (India) Salem local chapter conducted one day Workshop on "Smart Irrigation System using Intelligent Techniques on 5th February 2020.



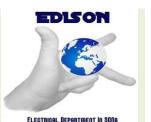
Department of Electrical and Electronics Engineering organized Webinar on Electrical Vehicle Technology on 14th February 2020.



Department of Electrical and Electronics Engineering conducted Techno Cultural fest CONSILIO KRIVVAS on 6th March 2020.Students from other schools and colleges participated and won exciting cash prices.



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Research and Development Activities



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Sona SPEED Research and Development centre in Department of EEE Delivered 5 Nos. of Miniature reaction wheel (MRW) to M/s Indus Teqsite for use in future Student satellite missions.



SonaSPEED team Successfully realised and delivered of 6 Nos. of Earth Sensor BLDC motors to Laboratory for Earth Optics Systems (LEOS), ISRO, Bangalore.





Our Chairman Inaugurated CLEAN ROOM OF CLASS 1000 (as per US FED STD 209E) at first floor SonaSPEED lab on 2nd December 2019.





Department of EEE organised International Conference on Power Engineering-Powercoin'20 on March 12th &13th March 2020. 120 research papers were presented in the conference. Two keynote speakers Dr.Mazlan Abbas from Malaysia & Mr.Prakash Bhattarai from Australia have participated and delivered their address.

Also Panel discussion on Industry 4.0 - challenges & opportunities was carried out with active participation of industrial experts. Dr.R.Shivakumar & Dr.M.Senthil kumar were the organising chairs, Dr.Padma HOD/EEE was the Convener & Dr.S.R.R.Senthil Kumar Principal/SCT was the CO-Patron for the conference.

"Dr.S.Chandrasekar, Dean (R&D), Head/SonaPERT and his team members developed "4 kW Deck Power Converter for Deep Sea Mining Applications", which is a product developed for the National Institute of Ocean Technology, NIOT, Chennai.

Dr. C. Santhana Lakshmi and Dr. R. Satheesh kumar received 1.7 lakhs through SEED money proposal from Sona college of Technology for "Solar Powered Electric Vehicle"



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Strategic Planning Workshop was conducted by Dr. S. Padma, Dr. R. Shivakumar and Dr. M.Gopila on 16th December 2019 in Mechanical Conference Hall.

Dr. C. B. Venkatramanan was Guest speaker for "New Trends in Industrial Automation" – IE(I) Sponsored Workshop in Thiagrajar Polytechnic College on 20^{th} December 2019.

NPTEL Faculty Achievements

			Certificate
SL No	Course Name Name		
		222	Type
1.		DR R	
1.	Stress Management	SHIVAKUMAR	5 % Topper
2.	Introduction to		Elite+Silve
2.	Internet of Things	DR M GOPILA	r 5%topper
2	Introduction to Smart		
3.	Grid	PURUSHOTHAM.S	Elite
4	Introduction to Smart	DR G	
4.	Grid	KARTHIKEYAN	Elite
_	Introduction to Smart	DR R	
5.	Grid	ARULMOZHIYAL	Elite
6.	Introduction to Smart		
0.	Grid	DR M GOPILA	Elite
7	Introduction to Smart	DR C	
7.	Grid	KALAIVANAN	Elite
8.	Fundamentals of		
8.	Electric Drives	PERIASAMY V M	Elite
		DR	
9.	Introduction to Smart	C.B.VENKATRAM	
	Grid	ANAN	Elite
10.	Introduction to Smart		
10.	Grid	DR B KARTHIK	Elite



Two of the NCC students Miss.S.Kavya(Third year EEE)and Miss.K.J.Sangeetha sri(Third year CSE)had participated in 71st National Republic Day celebration 2020 held at India Gate to Rajpath in New Delhi.

EXTR-CURRICULAR / CO-CURRICULAR ACTIVITIES



Swetha J, III year EEE



S. Jagadeswari, II year EEE



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