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New Vision and Mission

College has been revised the new vision and mission, based that department of Electrical and Electronics Engineering revised the vision, mission, PEO and PSO.

Sona College of Technology (Autonomous)

Sona College of Technology (SCT) is established in the year 1997. It is one of the nationally ranking Autonomous self-financing Institutions founded by the Visionary Late Mr. M.S. Chockalingam Chettiar.

Vision & Mission Statements of the Institution

Vision of the Institution

To become an institute of great repute, in the fields of Science, Engineering, Technology and Management studies, by offering a full range of programmes of global standard to foster research, and to transform the students into globally competent personalities.

Mission of the Institution

1. To offer Graduate, Post-graduate, Doctoral and other value-added programmes beneficial for the students
2. To establish state-of-the-art facilities and resources required to achieve excellence in teaching-learning, and supplementary processes
3. To provide Faculty and Staff with the required qualification and competence and to provide opportunity to upgrade their knowledge and skills
4. To motivate the students to pursue higher education, appear for competitive exams, and other value added programmes for their holistic development
5. To provide opportunities to the students and bring out their inherent talent
6. To establish Centres of excellence in the emerging areas of research

7. To have regular interaction with the Industries in the area of R & D, and offer consultancy, training and testing services
8. To offer Continuing education, and Non-formal vocational education programmes that are beneficial to the society
9. To inculcate entrepreneurial attitude in the students and to provide a platform to start their own startups in the campus.

Department of Electrical and Electronics Engineering

Vision of the Department

To be a leader in electrical and electronics engineering education and training by producing globally competent graduates who excel in their chosen careers and are successfully involved in innovative research and entrepreneurship with a strong commitment towards societal development.

MISSION – EEE

1. To offer undergraduate, postgraduate, and doctoral programmes in EEE through formal, non-formal, part-time and full-time delivery modes.
2. To provide state-of-the-art resources that contribute to the achievement of excellence in teaching-learning and research & development activities.
3. To organise faculty development programmes in need-based areas to enhance their capability in teaching, publishing research papers in peer reviewed journals, filing patents and for their overall career enhancement.
4. To provide special learning opportunities and a conducive environment for students to enhance their skills in technical, co-curricular activities, extra-curricular activities, entrepreneurship, soft skills and personality traits.
5. To enhance the research facilities, training, and consultancy services to bridge the gap between industry and academia.
6. To offer continuing education and need-based skill development programmes to the students for sustainable improvement and development of the society.

Program Outcomes (POs)

Engineering Graduates will be able to:

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

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

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

4. 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.

5. 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.

6. 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.

7. 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.

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

9. Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. 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.

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

12. 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.

Program Educational Objectives (PEOs)

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, organizational and societal growth.

Program Specific Outcomes (PSOs)

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

1. 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.
2. 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.

Energy Conservation TIPS

"Earth provides enough to satisfy every man's needs, but not every man's greed" By Mahatma Gandhi

Conserve energy and electricity at College:

- I. Activate power management features on computer and monitor so that it will go into a low power "sleep" mode when the students and staff are not working on it.
- II. Turn off the monitor when the students and staff leave the table.
- III. Whenever possible, shut down rather than logging off.
- IV. Turn off unnecessary lights and use daylight instead.
- V. Avoid the use of decorative lighting.
- VI. Use LED or compact fluorescent bulbs.
- VII. Keep lights off in conference halls, classrooms, seminar halls when they are not in use.
- VIII. Use the fans only when needed.
- IX. Unplug appliances not plugged into power strips (Like TVs, Refrigerators, ACs, tea/coffeepots, printers, and chargers etc.)
- X. Activate 24°C as set point in Air conditioning.

Conserve energy and electricity at home:

- I. Adjust your day-to-day behaviors
- II. Replace your light.
- III. Use smart power strips
- IV. Install a programmable thermostat
- V. Use energy-efficient appliances
- VI. Reduce water heating expenses
- VII. Install energy-efficient windows

- VIII. Upgrade your HVAC system
- IX. Weatherize your home
- X. Insulate your home
- XI. Wash your clothes in cold water when possible
- XII. Replace or clean your air filters
- XIII. Use your toaster oven instead of your oven
- XIV. Use natural light
- XV. Dress appropriately for the weather inside and outside

Department Events



Sona College of Technology had signed MoU with Capgemini Engineering, Bengaluru for mutual knowledge transfer and benefits on 23.12.2021 in VLSI & Embedded Systems domain for EEE and ECE Students.

SONA COLLEGE OF TECHNOLOGY
Learning is a Celebration!
An Autonomous Institution

CELEBRATING 25th YEAR
Silver Jubilee

Department of Electrical & Electronics Engineering

INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiatives)

IEEE

Guest Lecture on
Basics of Railway Signalling
23.04.2022 | 11:00 am - 1:00 pm

Mr. G. Dineshvaran
Signalling Design Lead,
Alstom Transportation India Pvt Ltd,
Bengaluru
Alumnus of 2018 Batch

Convenors
Dr. S. Padma
HOD / EEE

Coordinator
Dr.M.Gopila, Asst.Prof (Sr.G)/EEE
Dr.G.Suresh, Asst.Prof/EEE

Organizer
Dr.K.Krishnamoorthi, Asso.Prof / EEE
Dr.M.Panneerselvam, Asst.Prof / EEE



Guest Lecture conducted on 23.04.2022 in Basics of Railway Signalling by Mr. G. Dineshvaran, Signalling Design Lead, alstom transportation india Pvt. Ltd., Bangalore, India. Third year students are benefited through this event.

SONA COLLEGE OF TECHNOLOGY
Learning is a Celebration!

Department of Electrical & Electronics Engineering

Online Industrial Guest Lecture on

Connected World : IoT and its applications
09.04.2022 | 11:00 am - 01:00 pm

Mr. R. Mahendrarvarman
Staff Engineer,
Qualcomm Hardware Division,
Bengaluru

Convenors
Dr. S. Padma
Dr. R. Shivakumar

Coordinator
Dr.M.Gopila, Asst.Prof (Sr.G)/EEE
Dr.G.Suresh, Asst.Prof/EEE

Organizer
Dr.C.Santhana lakshmi, Asso.Prof / EEE
Dr.R.Satheeshkumar, Asst.Prof / EEE



Guest Lecture conducted on 09.04.2022 in by Mr. R. Mahendrarvarman, Staff Engineer, Qualcomm Hardware Division, Bangalore, India. Third year students are benefited through this event.



Department of EEE in association with IEEE organized a guest lecture on "SWOC analysis for personality development". Students from second year EEE and faculty attended the session.



Parent Teachers meeting-2022 for second year students was conducted. HOD, Class Counsellors, Career coordinator and Placed final year students addressed the meeting.



Department Edison association and IEEE have organized Innovative Project Exhibition on the theme "Electric lamp/Diya, Electric toys and solar based applications". More than 50 teams from II year and III year had participated and presented their innovative ideas.





Department of EEE students have participated in Sona Speakers Forum Event. 15 students participated in this event and they delivered their talk on various titles, also won the 1st and 3rd Place.



EDISON'22, a national level technical symposium has been conducted on **May 5th & 6th** 2022 by the department of EEE. 5 technical and 6 non-technical events were conducted. **270** Students from various colleges participated in the technical and Non-technical events and won cash prizes.



The Leadership team from Capgemini Engineering visited the campus. They have interacted with the EEE & ECE department students and faculty.

Student Achivement



Anna University Zonal Level Volleyball Tournament – Sona College of Technology Women's team Won the first place, SirNisharga 1st Year – EEE in the team.



Anna University Zonal Level Tennis Men's Tournament – Sona College of Technology men's team Won the first place, Kavin Jayakumar IV year & Athesh.A II year EEE in the team.



Mr. Vishnu Prasanth of Second Year EEE won State level 2nd place in keyboard solo performance award Organized by Mastro Music Institute.



A three days virtual Hackathon was conducted by FIBRE partner Institutions in Canada and India. Students participated in multidisciplinary teams and won prizes for their innovative design concepts related to "Pressure Ulcers". THIRD PRIZE (Prize: 300 CAD)



Final Year EEE Students (J.S. Sweetha, J. Swetha, Rithisha) have received a grant of Rs. 7500/- (Seven Thousand Five Hundred only) under students Project Scheme from TNSCST for the project titled "IoT Based speaking system for Mute people Using Hand Gestures" under the guidance of Dr G Suresh.



Third year students Barath, Revanth, Jayanthan, Gokul, Manikandan, Mukilrajan got over all champion runner in sports day on 08.06.2022 at Sona College of Technology.

Paper Presentation by Students

Mr. HEMACHANDRAN G Participated in PROJECT EXPO at MUTHAYAMMAL ENGINEERING COLLEGE on 12.05.2022

Mr. BALAJI MV Participated in PROJECT EXPO at GOVT COLLEGE OF ENGINEERING on 22.04.2022

Mr. BALAJI MV and AJAY PRANAV M L Participated in PROJECT EXPO at KNOWLEDGE INSTITUTE OF TECHNOLOGY on 31.05.2022

Faculty Achievement



Dr. R. Shivakumar, Professor, EEE has got "BEST RESEARCHER AWARD" award for the academic year (2021-22) by Novel Research Academy, Puducherry on 20.04.2022.



Dr. A. Jagadeeshwaran, Professor, EEE has got "BEST INNOVATIVE TEACHER" award for the academic year (2021-22) by Novel Research Academy, Puducherry on 28.04.2022.



Dr. K. S. Yamuna, Assistant professor, EEE has got "BEST INNOVATIVE TEACHER" award for the academic year (2021-22) by Novel Research Academy, Puducherry on 28.04.2022.

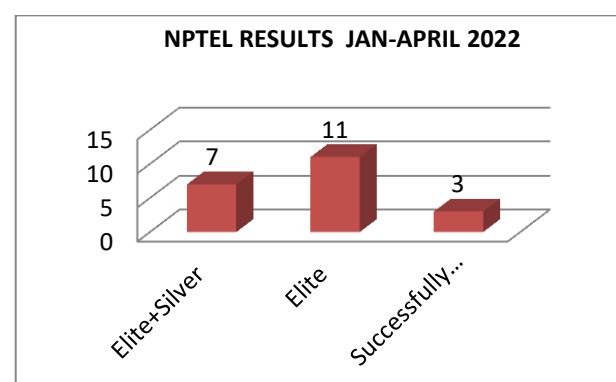


Dr. V. Shanmugasundaram, Assistant Professor, EEE has got "Academic Excellence Award" by IOT Academy, Coimbatore on 25.06.2022.

Patent Published and Filed by the faculty

S.No	Name of the Faculty(s)	Title of Patent	Year of Patent
1	Dr.A.Jagadeeshwaran H.Shree Kumar Dr.R.Shivakumar Dr.K.S.Yamuna.	Automatic medicine dispenser with reminder and method of dispensing medicine thereof"	Published dated 11.2.22
2	Dr.K.S.Yamuna	Use of 5G IoT network to handle moving objects in a smart environment	filing 31.03.22

NPTEL – Faculty Participation



EEE Faculties have secured the 7 elite + silver and 11 elite. Dr Venkatramanan C B secured 2% topper.

Projects from R&D Centers

SonaSPPED R&D Centre:

Prof N Kannan, Dr S Vijay Shankar and V M Periyasamy team to develop and supply the BLDC motors to Agnikul Cosmos Private Limited.

Prof N Kannan, Dr S Vijay Shankar and V M Periyasamy team to develop and Supply Fuel pumping system to Defence Research and Development Laboratory, DRDO.

SonaPERT R&D Centre:

Dr.S.Chandrasekar successfully completed the project on "Development of Low-cost. Indigenous Diagnostic Device for Testing New Generation Monostable / Bistable Magnetic Actuated Medium Voltage Vacuum Circuit Breakers for Railways and Substation Applications" to DST/.



S. Jagadeeswari II year EEE C



Manoharan M III year EEE B

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