



SARANATHAN COLLEGE OF ENGINEERING



Venkateswara Nagar, Panjappur, Tiruchirappalli - 620012

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai &
Accredited by NAAC with A+ Grade)



Department of Electronics and Communication

(Newsletter for Even Semester 2020-2021)

From the Desk of Head-Electronics and Communication

Dr. M. Santhi

I take immense pleasure in bringing out the newsletter of Department of Electronics and Communication for the even semester of 2020 - 2021. Our Department is stepping its foot in 24th Year and ultimately it is a Jubilation to the institute. Thanks to the tireless efforts of eminent faculty members and Management.



The department strives to provide a conducive environment for the students to develop analytical and practical skills and apply them to real world problems. To motivate the students the department organizes regular training in state of art software & hardware, arranges workshop, technical events, seminars & industrial visit.

I applaud the contributors for their stimulated thoughts and varied hues in articles contributed by them. Commendable job has also been done by the Editorial Board in planning for and producing the Newsletter. My congratulations to the team who took the responsibility for the arduous task most effectively. I am hopeful that this small piece of technical work shall not only develop the taste for reading among students but also develop a sense belonging to the institution as well.



This newsletter is a summary of the events and accomplishments of the Department of Electronics and Communication for the even semester of 2020 - 2021. Notwithstanding the ephemeral nature of the events, their outcomes are bound to be eternal and fruitful for everyone concerned. It is an attempt to pen down such memories so as to re-live the moments and eternalize them.

Wish to continue penning down many more such events and accomplishments in the years to come that are organized to realize the outcomes of improved knowledge and skills for the students, the faculty members and the improvement in the academic quality of the institution.

Vision of the Institution

Impart an inclusive engineering education that beyond being a facilitator for a career and rudimentary skills, equips the students to offer ethically & environmentally conscious solutions to societal issues.

Mission of the Institution

Develop the Institution into a Model Self Financing College of Engineering and Technology. Professional Training to our students with State of the art Laboratories and converting them into Technocrats of international repute.

1. Create a nurturing, holistic environment of engineering education to facilitate every student realize their full potential
2. Strive to make the students strong in basic concepts armed with appropriate skills to enhance one's ability to apply the knowledge to provide solutions to real time issues.
3. Maintain an ambience that facilitates the students to strengthen their ethical value systems.
4. Actively promote R&D and institute-industry interaction.

Vision of the Department:

To become a leading department of Higher Learning and a Research Centre of Excellence in Research in Electronics and Communication Engineering.

Mission of the Department:

- **M1:** To enable budding engineers to obtain technical exposure in various areas of Electronics and Communication Engineering.
- **M2:** To nurture career improvement.
- **M3:** To initiate and sustain research activities in the department in cutting edge areas of Electronics and Communication Engineering.
- **M4:** To develop professional and ethical attitude in the students.

Program Educational Objectives (PEOs)

Graduates of Electronics and Communication Engineering will

PEO1: have a strong foundation in the required sciences in order to pursue studies in Electronics and Communication Engineering.

PEO2: have a broad exposure to the students in various topics related to Electronics and Communication Engineering fields, to enable them to excel in their professional career / higher studies.

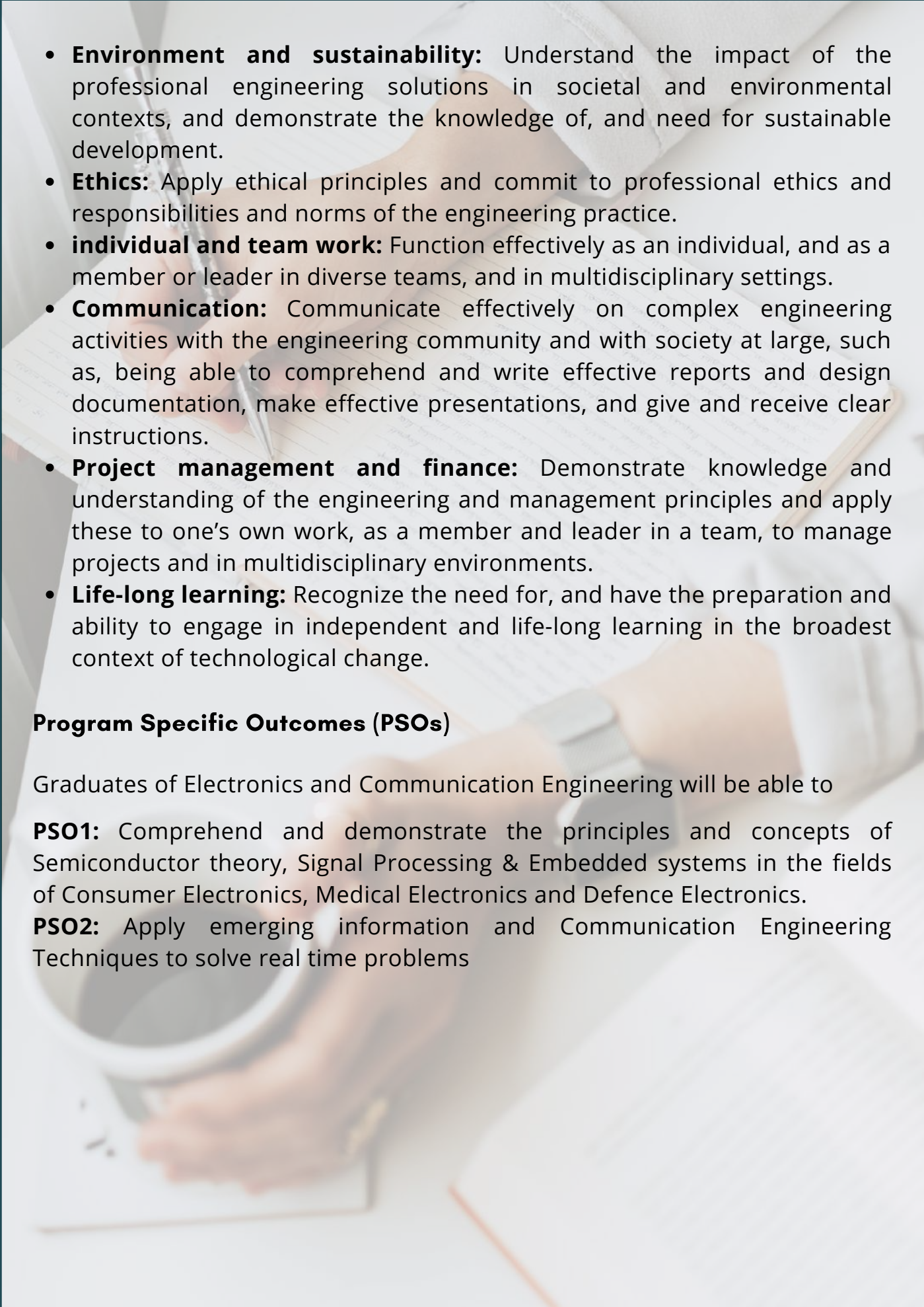
PEO3: possess innovative skills in order to solve the technical problems which will arise in their professional life.

PEO4: have professional and ethical attitude and an ability to visualize the engineering issues in a broader social context.

Program Outcomes (POS)

Engineering Graduates will be able to

- **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **Problem analysis:** Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **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.
- **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.
- **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- **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.

- 
- **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.
 - **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
 - **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
 - **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.
 - **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.
 - **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 Specific Outcomes (PSOs)

Graduates of Electronics and Communication Engineering will be able to

PSO1: Comprehend and demonstrate the principles and concepts of Semiconductor theory, Signal Processing & Embedded systems in the fields of Consumer Electronics, Medical Electronics and Defence Electronics.

PSO2: Apply emerging information and Communication Engineering Techniques to solve real time problems

Faculty Development Programs:

- A Five-day Training and Learning ATAL Academy FDP, sponsored by AICTE was conducted on **"Cognitive Radio, Antennas and Millimeter wave Communication"** from 07-06-2021 to 11-06-2021. The objective of this online FDP is to provide a forum for the faculty to enhance their knowledge in the field of wireless communication. The noble aim is to bring together the professional and budding researchers on a common platform to discuss and exchange the ideas on recent developments and challenges in field of Electronics & Communication Engineering. This will provide an opportunity to faculty to grade their work, to learn new methods of experimentation and analysis and to new directions in their research and organization.





Faculty development Programmes attended:

- Dr.M.Padmaa

- 1.Attended the FDP on "**Artificial Intelligence**" from 4-Jan-21 to 8-Jan-21 conducted by PSNA College of Engineering and Technology.

- Dr.S.A.Arunmozhi

- 1.Attended the ATAL FDP on "**Augmented Reality and Virtual Reality**" from 4-Jan-21 to 8-Jan-21 conducted by NARASARAOPETA ENGINEERING COLLEGE
- 2.Attended the FDP on "**COGNITIVE RADIO, ANTENNAS & MILLIMETRE WAVE COMMUNICATION**" from 7-Jun-21 to 11-Jun-21 conducted by Saranathan College of Engineering
- 3.Attended the FDP on "**PATENT DRAFTING AND FILING**" from 14-Jun-21 to 18-Jun-21 conducted by Jerusalem College of Engineering, Chennai

- Dr.S.Rajeswari

- 1.Attended the FDP on "**Augmented Reality (AR)/ Virtual Reality (VR)**" from 4-Jan-21 to 8-Jan-21 conducted by NARASARAOPETA ENGINEERING COLLEGE
- 2.Attended the FDP on "**Modern Techniques for Wireless Communication**" from 17-May-21 to 21-May-21 conducted by ATAL
- 3.Attended the FDP on "**COGNITIVE RADIO, ANTENNAS & MILLIMETRE WAVE COMMUNICATION**" from 7-Jun-21 to 11-Jun-21 conducted by ATAL
- 4.Attended the FDP on "**Inculcating Universal Human Values in Technical Education**" from 3-May-21 to 7-May-21 conducted by AICTE

- Dr.V.Mohan

- 1.Attended the FDP on "**Speech Processing using Deep Learning**" from 28-Dec-20 to 1-Jan-21 conducted by IIT, Dharwad

- Dr.P.Shanmugapriya

- 1.Attended the FDP on "**Speech Processing using Deep Learning**" from 28-Dec-20 to 1-Jan-21 conducted by IIT, Dharwad

- S.Hariprasath

- 1.Attended the FDP on "**COGNITIVE RADIO, ANTENNAS & MILLIMETRE WAVE COMMUNICATION**" from 7-Jun-21 to 11-Jun-21 conducted by Department of ECE, Saranathan College of Engineering.

- P.Sivagamasundhari

- 1.Attended the FDP on "**COGNITIVE RADIO, ANTENNAS & MILLIMETRE WAVE COMMUNICATION**" from 7-Jun-21 to 11-Jun-21 conducted by Department of ECE, Saranathan College of Engineering.

- J. Eindhumathy

- 1.Attended the FDP on "**COGNITIVE RADIO, ANTENNAS & MILLIMETRE WAVE COMMUNICATION**" from 7-Jun-21 to 11-Jun-21 conducted by SARANATHAN COLLEGE OF ENGINEERING, AICTE Training And Learning (ATAL) Academy Online Elementary FDP.

- 2.Attended the FDP on "**Training for Teachers Orientation for Newly Admitted Students**" from 22-Feb-21 to 27-Feb-21 conducted by Indra Ganesan College of Engineering, AICTE Training And Learning (ATAL) Academy.

- A.Shamimbanu

- 1.Attended the FDP on "**Artificial Intelligence**" from 1-Apr-21 to 1-Aug-21 conducted by AICTE Training And Learning (ATAL) Academy, Dr Ambedkar Institute of Technology

- M.Mahendran

- 1.Attended the FDP on "**Speech Processing using Deep Learning**" from 28-Dec-20 to 1-Jan-21 conducted by IIT, Dharwad

- G.Sivakannu

- 1.Attended the FDP on "**Quantum Computing**" from 4-Jan-21 to 8-Jan-21 conducted by AICTE Training And Learning (ATAL) Academy GITAM Deemed University at Bengaluru
- 2.Attended the FDP on "**A New Cooperative Wireless Strategy: Soft Information Forwarding**" from 28-Apr-21 to 14-May-21 conducted by Department of ECE, NIT Trichy

- V.Ramya

- 1.Attended the FDP on "**Fundamentals of Machine Learning (Online Live FDP)**" from 16-Feb-21 to 20-Feb-21 conducted by ICT Academy

- M.Anthuvan Lydia

- 1.Attended the FDP on "**E CERTIFICATE - TRAINING FOR TEACHER'S ORIENTATION FOR NEWLY ADMITTED STUDENTS PHASE- II**" from 22-Feb-21 to 27-Feb-21 conducted by Indra Ganesan college of Engineering

- V.Koushick

- 1.Attended the FDP on "**Cognitive Radio, Antennas and Millimeter wave Communication**" from 7-Jun-21 to 11-Jun-21 conducted by DEPARTMENT OF ECE, Saranathan College of Engineering
- 2.Attended the FDP on "**Training for Teachers Orientation for Newly Admitted Students**" from 22-Feb-21 to 27-Feb-21 conducted by Department of Science and Humanities Indra Ganesan College of Engineering, Tiruchirappalli

- R.Vaishanavi

- 1.Attended the FDP on "**GIS and remote sensing**" from 4-Jan-21 to 8-Jan-21 conducted by AICTE Training And Learning (ATAL) Academy, University College of Engineering, JNTU Kakinada

Achievements of Students:

- M.P.Kaviya, S.Hari Ganesh, K.Kaviya, S.Bharath Hari - 2nd year A - won Community Prize for successful contribution of project on **"Abode Cleaning Assistant (Bluetooth RC Control)"** - may 2021
- V.S.Roshana - 2nd year B - won First prize in the event **"Rebuttal Rebels"** at TECHASTRA'21 - June 2021

Students Participation in events:

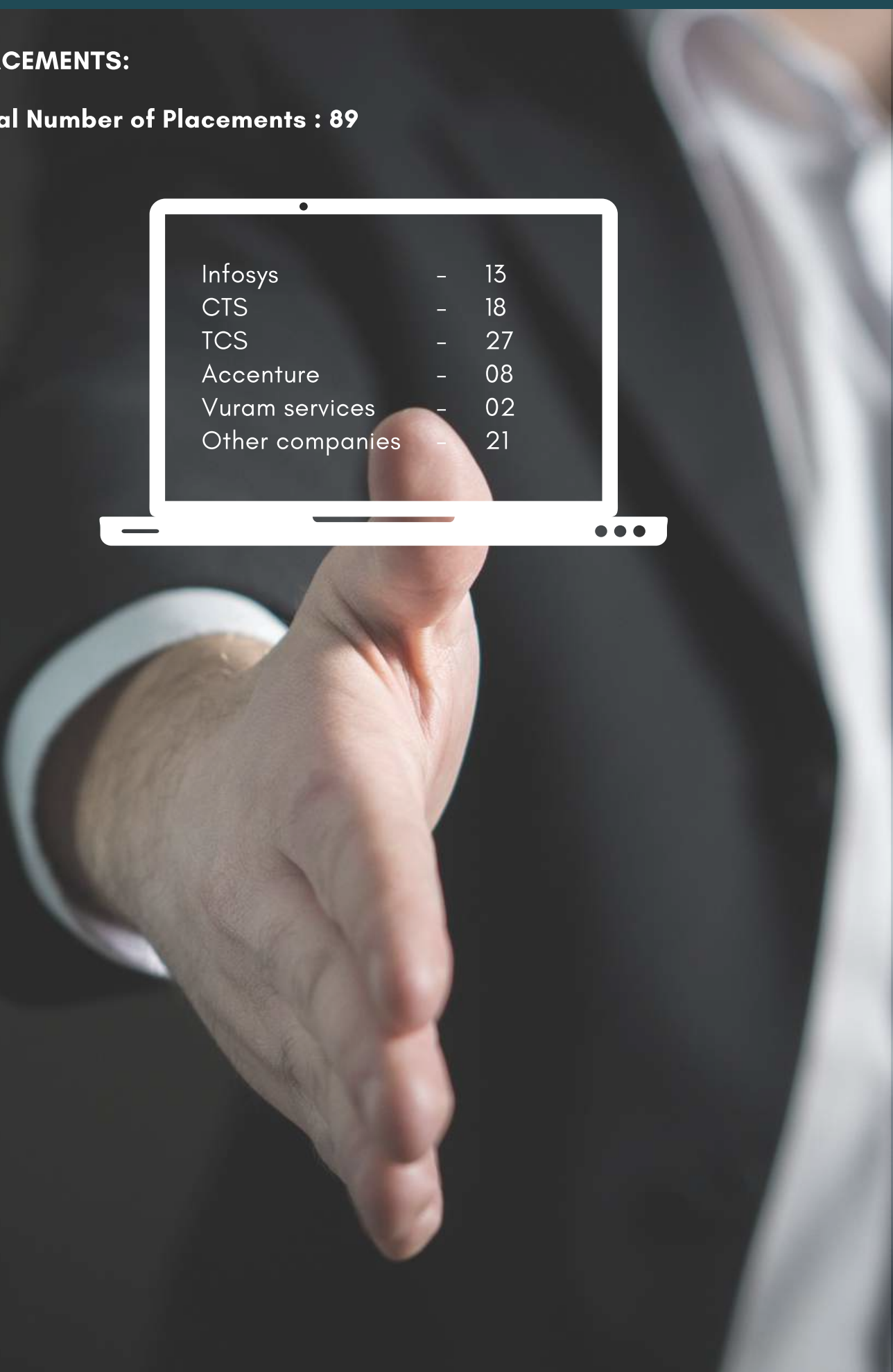
- Karthiga Devi G - 3rd year A - **CAMPUS AMBASSADOR INTERNSHIP(ISP'20)** - Internshala - November 2020 to January 2021
- Sivaram R - 3rd year B - **"Research internship at END NOW FOUNDATION"** - Internshala - June to July 2021
- Keerthana R - 2nd year A - participated in the **"Entrepreneurship & Digital Innovation"** - Lingaya's Lalita Devi institute of management and sciences - June 6, 2021
- Vinodhini V - 2nd year B - participated in the online quiz competition on **"Maths Quiz"** - Sri Krishnasamy Arts & Science College - June 2021
- Deebiksha D- 1st year A - participated in **"A Millennial's Dream"** conducted by Infosys - May 2021
- Karthika Mohan - 1st year A - participated in the **"TopCoders'21"** organized by E-Box Colleges in association with Virtusa and TiE, Coimbatore - 5th March 2021
- Akaash T U - 1st year A - participated in **"A Millennial's Dream"** conducted by Infosys - May 2021
- Lakshadheepa C - 1st year A - Workshop on **"Ethical Hacking"** - National Institute of Technology, Tiruchirappali - December 2020

- Roshana V S – 2nd year B

1. Presented a paper on "**Economics of fuel price hike : A line of no control**" – St. Joseph's College (Autonomous) Devagiri, Calicut
2. Webinar on "**WIE Tales: College of Corporate**" – Panimalar Institute of Technology, Chennai – June 2021
3. Webinar on "**Reliability of Power Converters**" – Panimalar Institute of Technology, Chennai – June 2021
4. Webinar on "**Electric Vehicle Technology**" – CSI College of Engineering, Ooty – June 2021
5. Webinar on "**The status of Discrete and Integrate GaN devices**" – Panimalar Institute of Technology, Chennai – June 2021
6. Webinar on "**Power Electronics: A Research Perspective**" – Panimalar Institute of Technology, Chennai – June 2021
7. Webinar on "**GaN HEMT for efficient power conversation**" – Panimalar Institute of Technology, Chennai – June 2021
8. Webinar on "**Insight of Preparing Research article and Effective usage of Mendeley Software**" – Jai Shriram Engineering College, Tiruppur – June 2021
9. Webinar on "**BLDC Drive and control systems for electric vehicles - Oppurtunities for young Engineers**" – Panimalar Institute of Technology, Chennai – June 2021
10. Webinar on "**Roadmap to Research**" – Jai Shriram Engineering College, Tiruppur – June 2021
11. Participated in "**Quizion - Quiz Contest**" – Panimalar Institute of Technology, Chennai – June 2021

PLACEMENTS:

Total Number of Placements : 89

A hand in a white shirt sleeve points towards a laptop screen. The screen displays a table of placement statistics.

Infosys	-	13
CTS	-	18
TCS	-	27
Accenture	-	08
Vuram services	-	02
Other companies	-	21