



You Choose, We Do It

St. JOSEPH'S COLLEGE OF ENGINEERING

(An Autonomous Institution)

St. Joseph's Group of Institutions

OMR, Chennai - 119



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Newsletter

November 2024



**St. JOSEPH'S
GROUP OF INSTITUTIONS**
OMR, CHENNAI - 119



The Choice of
Disciplined Toppers



VISION

To become a world class renowned department where dissemination and application of knowledge in design and analysis of electronic circuits in the field of communication is delivered and to synergistically balance through relentless pursuit of student success towards the economic prosperity of the society and the world at large.

MISSION

Professionalism: Achieve excellence in teaching, learning, and educational activities which ensure that each student has the opportunity to attain his or her fullest potential

Core Competence: Inculcate innovative skills, research aptitude, team-work, ethical practices in students so as to meet expectations of the industry as well as society.

Research: Provide research and intellectual resources that address problems facing the industry and the world, while advancing the boundaries of disciplinary and multidisciplinary research and its applications.

Industrial Interaction: Provide professional development opportunities for all by creating an open and accessible learning environment and incorporating appropriate technology through collaboration with industry

PROGRAM OUTCOMES

1. Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution 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 process 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 proceed 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 team work: 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

1. To enable graduates to pursue research, or have a successful career in academia or industries associated with Electronics and Communication Engineering, or as entrepreneurs.
2. To provide students with strong foundational concepts and also advanced techniques and tools in order to enable them to build solutions or systems of varying complexity.
3. To prepare students to critically analyze existing literature in an area of specialization and ethically develop innovative and research oriented methodologies to solve the problems identified.

EVENTS OF NOVEMBER-2024

- Alumni Activities
- Placement Empowerment Program
- Student Achievements
- Staff Achievements
- Classroom to Corporate

ALUMNI ACTIVITIES

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

in association with

PLACEMENT EMPOWERMENT PROGRAM
VLSI DESIGN CENTRE

INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

Technical Talk on

INTRODUCTION TO DESIGN FOR TEST IN VLSI

Prashant Seetharaman
DFT Product Engineer
Siemens DISW
USA
ECE Alumni Batch: 2011-2015

DFT Demystified: A Deep Dive into VLSI Testing

A technical talk featuring Mr. Prashant Seetharaman, a distinguished alumnus from our 2011-2015 batch. Prashant's insightful presentation on "Introduction to Design for Test in VLSI" shed light on the crucial role of DFT in ensuring the quality and reliability of VLSI chips.

The session covered:

- **Core Concepts of DFT:** A comprehensive overview of DFT techniques and their applications.
- **Real-world Challenges and Solutions:** Practical insights into overcoming common challenges in VLSI testing.
- **Future Trends in DFT:** A glimpse into the evolving landscape of VLSI testing.
- By attending this event, participants gained a deeper understanding of DFT and its impact on the entire VLSI design cycle.

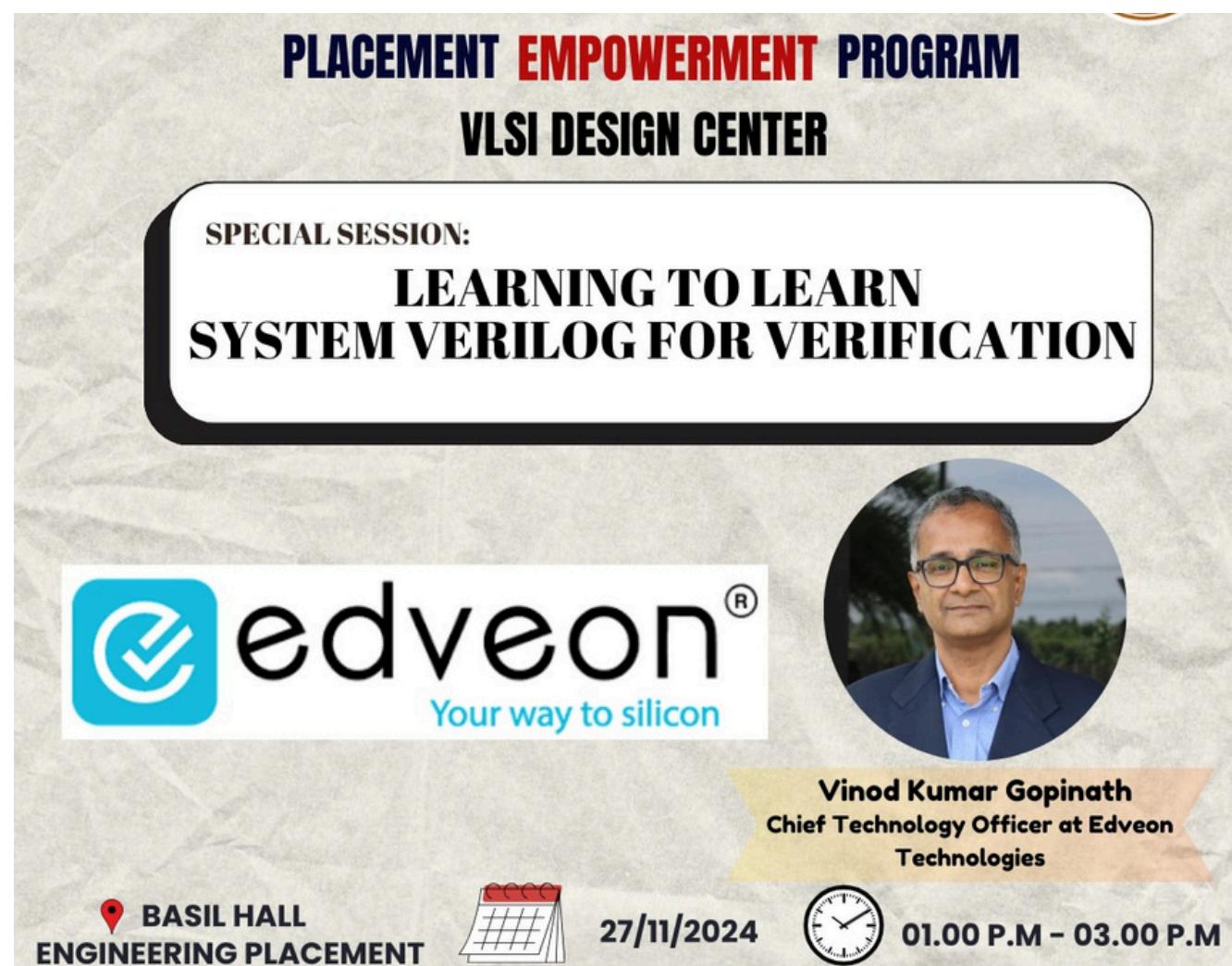
ALUMNI ACTIVITIES

Glimpse of Mr. Prashant talk, Alumnus, SIEMENS , USA



Placement Empowerment Program

System Verilog by Edveon Technologies



Learning to Learn System Verilog for Verification: A Deep Dive

VLSI Design Center hosted an enlightening session on "Learning to Learn System Verilog for Verification" as part of the Placement Empowerment Program. The session was graced by Mr. Vinod Kumar Gopinath, CTO of **Edveon Technologies**, who shared his extensive knowledge and experience in System Verilog and its applications in hardware verification.

Mr. Gopinath's insightful presentation demystified complex System Verilog concepts, making them accessible to all attendees. The session delved into real-world industry practices, providing valuable insights into the practical applications of System Verilog in the field of hardware verification.

Placement Empowerment Program

Glimpse of Edveon Technologies special Session



Placement Empowerment Program

**PLACEMENT
EMPOWERMENT
PROGRAM
VLSI DESIGN CENTRE**

BHARATHWAJ T A
Principal Engineer - Physical Design
Microchip Technology Inc
Chennai, Tamilnadu

**TECH TALK:
DESIGNING A CHIP,
THE INDUSTRY WAY**

Unveiling the Secrets of Chip Design: A Tech-Talk with Industry Expert

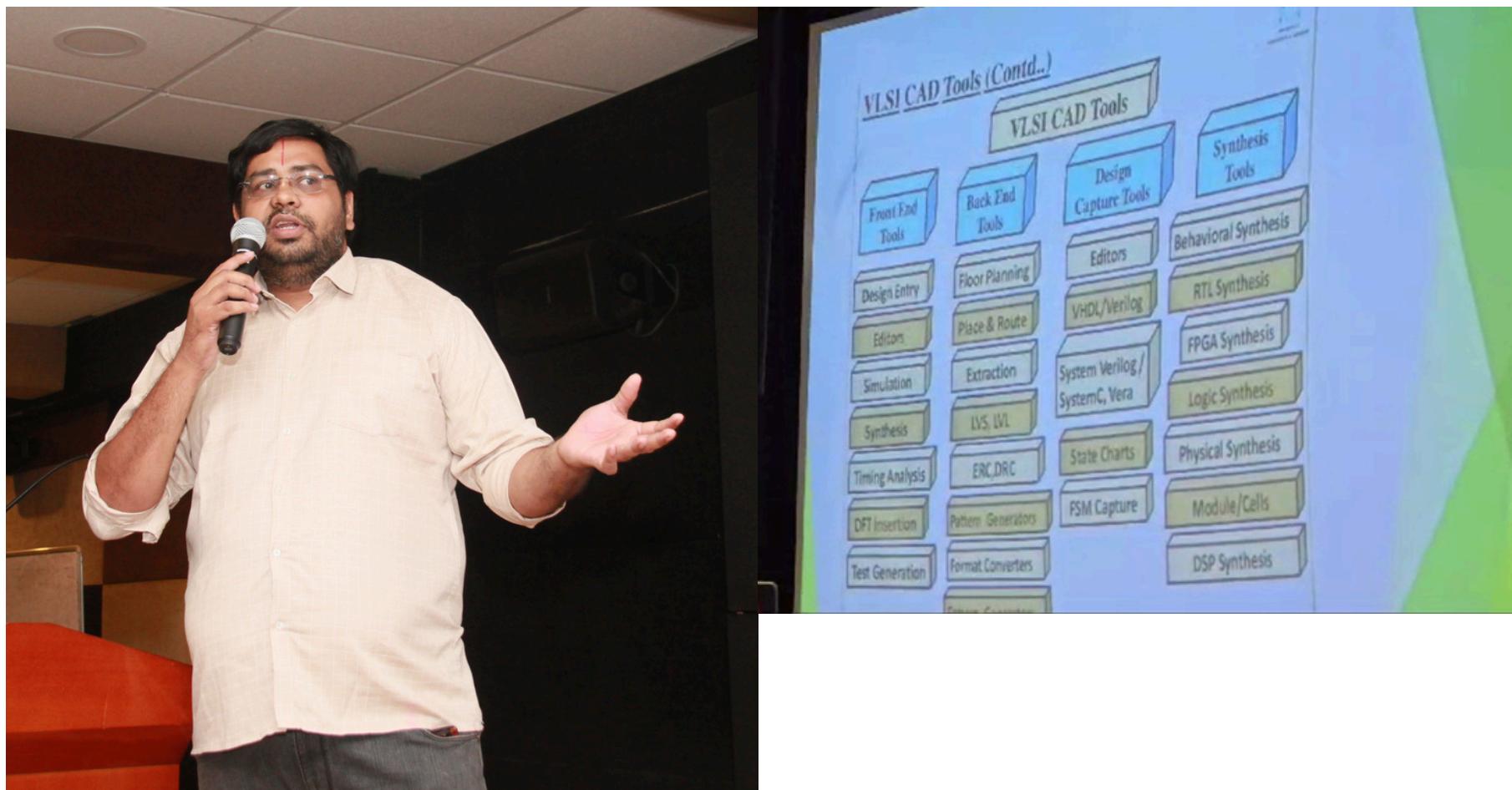
A captivating tech-talk featuring Mr. Bharathwaj TA, a distinguished Principal Engineer at Microchip Technology Inc., Chennai. His insightful presentation on "Designing a Chip, the Industry Way" provided a comprehensive overview of the intricate process of chip design.

Key Highlights:

- Industry Best Practices:** Mr. Bharathwaj shared valuable insights into the latest methodologies and tools used in the industry, providing a practical understanding of the chip design workflow.
- Essential Skill Sets and Career Opportunities:** The session delved into the core skills required for a successful career in chip design, such as proficiency in software tools, hardware architecture, and analytical skills. Mr. Bharathwaj also highlighted the diverse career paths available in this dynamic field, inspiring our students to explore their potential.

Placement Empowerment Program

Glimpse of Microchip Technology TechTalk



STUDENT ACHIEVEMENTS



NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



ECE Students Shine in NPTEL Certifications!

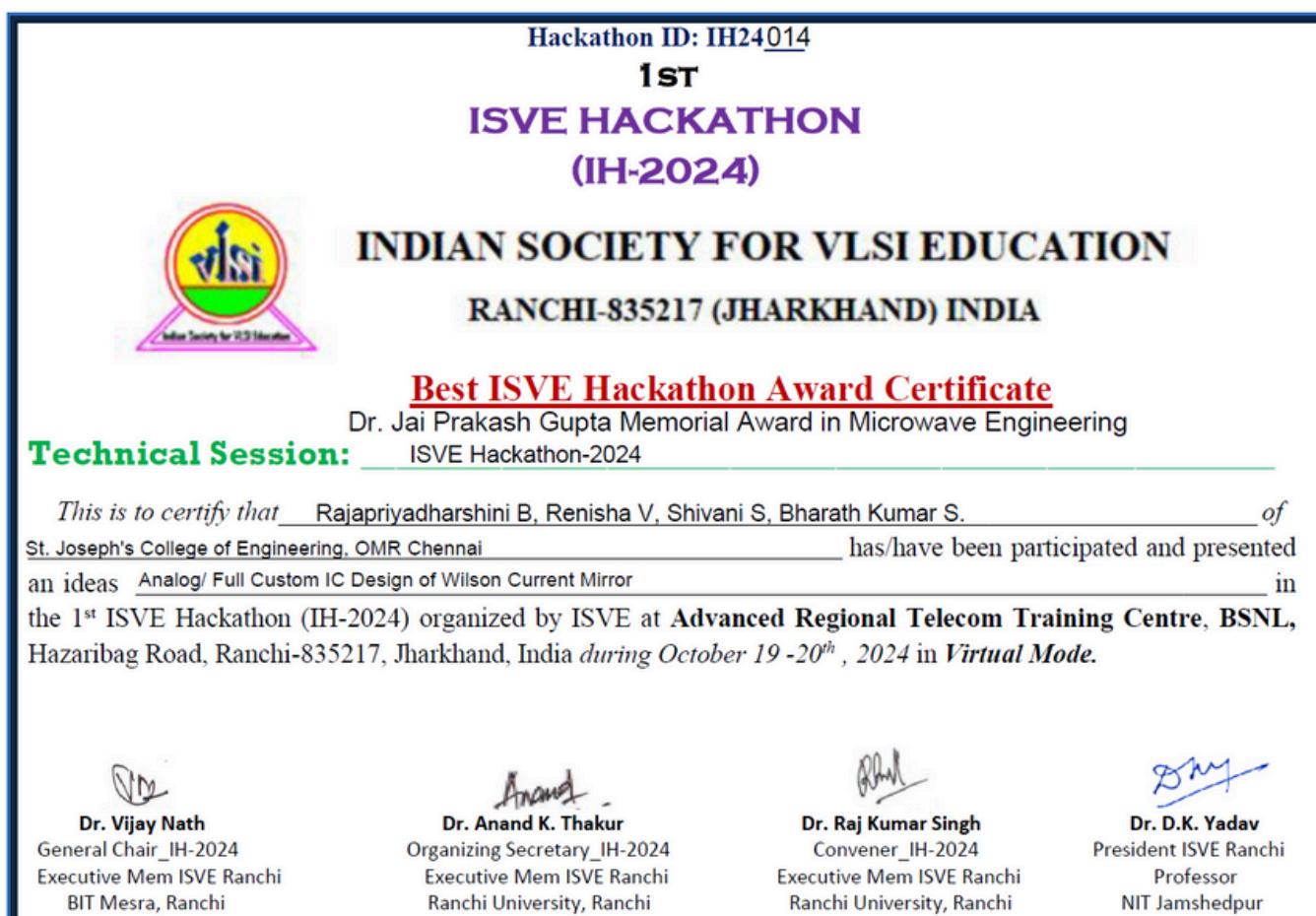
Our students continue to excel in online learning!
Congratulations to:

- Bhargavi. Y. R. (Final Year ECE) and Danusri B. (Third Year ECE) for achieving **Elite + Gold** in "Introduction to Internet of Things."
- Vanmathi Gunasekaran (Second Year ECE) for securing **Elite + Gold** in "Business Fundamentals for Entrepreneurs (Part 1: Internal Operations)."

Additionally, a total of 55 students from ECE department have earned **Elite + Silver certifications** in various NPTEL courses.

Students Achievements

B Rajapriyadharshini , V Renisha , S Shivani S Bharath Kumar of 3rd year ECE Students have received Best ISVE Hackathon Award Certificate for the paper “ Analog/Full Custom IC Design of wilson Current mirror” in the 1st ISVE Hackathon(IH-2024) Organised by ISCE at Advance Regional Telecom Training Centre, BSNL, Ranchi, Jharkhand



STAFF ACHIEVEMENTS

OUTREACH PROGRAM



Mr. M. Lingeswaran, Assistant Professor, ECE served as a 5G Consultant to DADB-German Academy of Digital Education for the Andhra Pradesh State Skill Development Corporation (APSSDC) sponsored “5G Communication Technology” Frameworks for 5G Test Bed Deployment” at Andhra Loyola Institute of Engineering and Technology, Vijayawada

STAFF ACHIEVEMENTS

OUTREACH PROGRAM



Mr. M. Lingeshwaran, Assistant Professor, ECE served as a 5G Consultant to DADB-German Academy of Digital Education for the Andhra Pradesh State Skill Development Corporation (APSSDC) sponsored “5G Communication Technology” Frameworks for 5G Test Bed Deployment” at Gayatri Vidya Parishad College of Engineering, Visakhapatnam.

STAFF ACHIEVEMENTS

OUTREACH PROGRAM



Mr. M. Lingeshwaran, Assistant Professor/ECE, served as a 5G consultant to DADB - German Academy of Digital Education for the Andhra Pradesh State Skill Development Corporation (APSSDC) sponsored "5G Communication Technology" course, and delivered hands-on training on “Harnessing the Power of Open Source Frameworks for 5G Test Bed Deployment” at VEMU Institute of Technology, P.Kothakota, Pakala, Andhra Pradesh 517112.

STAFF ACHIEVEMENTS

OUTREACH PROGRAM



Mr. M. Lingeswaran, Assistant Professor, ECE served as a 5G Consultant to DADB-German Academy of Digital Education for the Andhra Pradesh State Skill Development Corporation (APSSDC) sponsored “5G Communication Technology” Frameworks for 5G Test Bed Deployment” at Andhra Engineering College, Atmakur

STAFF ACHIEVEMENTS



Two faculty members from ECE department (Mr. M. Lingeshwaran & Dr. K. Ramachandra Reddy) attended MathWorks Seminar 2024 - Empowering Future Engineers for Space, Mobility and Sustainability at Le Royal Meridien Chennai co-sponsored by ARK Infosolutions Pvt. Ltd. and ICT ACADEMY. This will enhance the implementation strategies for Campus wide License of MATLAB and student empowerment in various domains that are in high demand with regard to industries.

STAFF ACHIEVEMENTS



Mr. M. Lingeshwaran (AP/ECE) had the privilege of attending the IEEE 5G/6G Innovation Testbed Workshop. This workshop, organized by IEEE in collaboration with EBSCO Information Services India Private Limited, took place on 20th November 2024 at Novotel Chennai Chamiers Road between 10:00 am and 01:00 pm. The workshop's primary focus was on transformative teaching, learning, and research using the IEEE 5G/6G Innovation Testbed.

STAFF ACHIEVEMENTS



Dr. P. Latha ASP/ECE, successfully completed a 5-day workshop from 19th to 23rd November 2024 on "RTL to GDSII using Synopsys Tools" organized by the Department of Electronics & Communication Engineering at G Narayananamma Institute of Technology and Sciences and Atal Incubation Centre GNITS, Hyderabad in collaboration with Synopsys Inc under its SARA (Synopsys Academic and Research Alliances) and VLSI EXPERT Private Limited.

STAFF ACHIEVEMENTS

PATENTS PUBLISHED

Dr. P. Ezhilarasi Published a Patent titled “ Virtual Reality Training Environment for Corporate Skill Development and Management”.

Dr.P.Latha Published a Patent titled “Automated Home Inventory Management Using Wireless Sensor Networks and Cloud Computing”.

Dr.D.Lakshmi Published a Patent titled “ IoT Based Eutrophication Monitoring System”.

Staff Achievements

Mr. M. Lingeshwaran ECE department Faculty has successfully completed the 5G Fundamentals with MATLAB course offered by MATHWORKS Training Services.



Course Completion Certificate

Lingeshwaran M

has successfully completed the requirements of the course titled

5G Fundamentals with MATLAB



DIRECTOR, TRAINING SERVICES

31 October - 1 November 2024

Mr. M. Lingeshwaran, Assistant Professor, ECE has received Certificate of participation from IEEE Advancing Technology for Humanity for participating in IEEE Horizons: Exploring 5G/6G innovations.

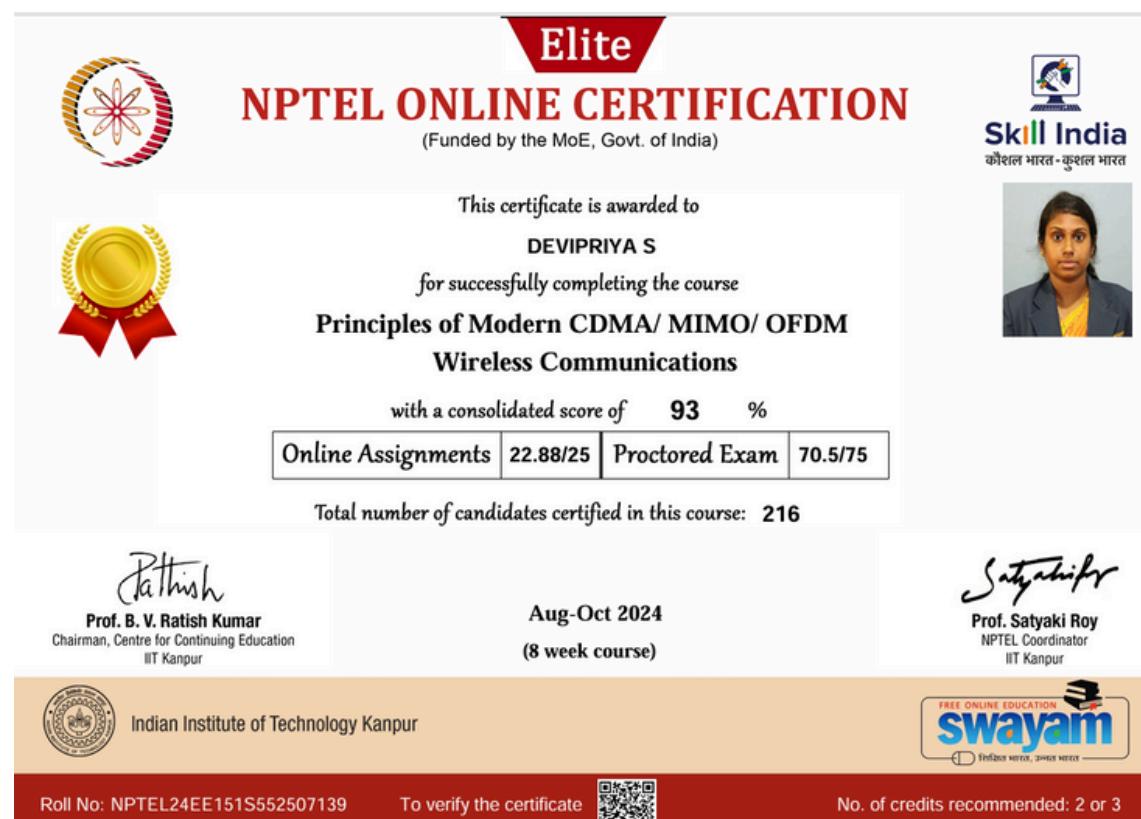


Staff Achievements

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

Dr. J. Martin Leo Manickam and Mrs. S. Devipriya have demonstrated exceptional knowledge and skills in the Principles of Modern CDMA/MIMO/OFDM wireless communication course, achieving the ELITE GOLD position.

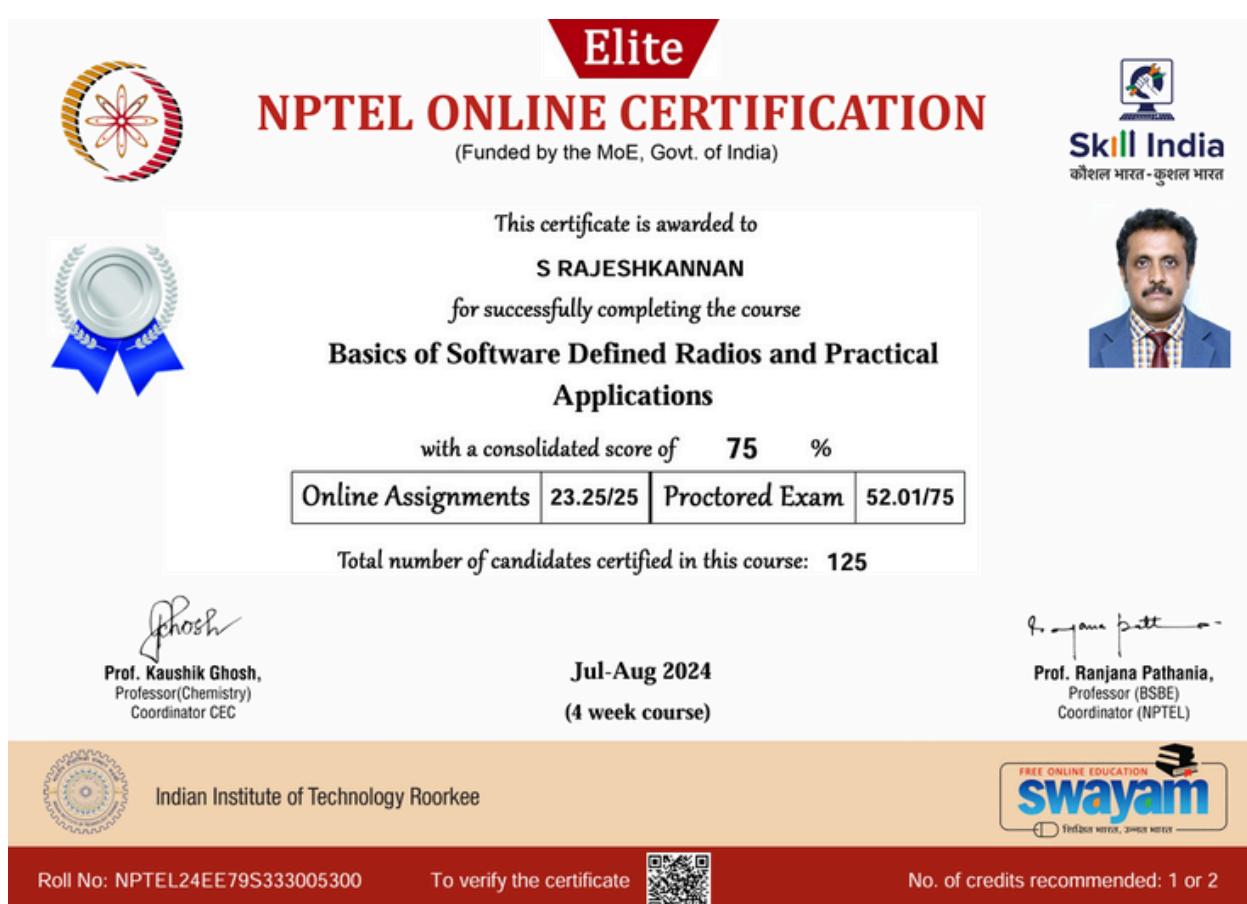
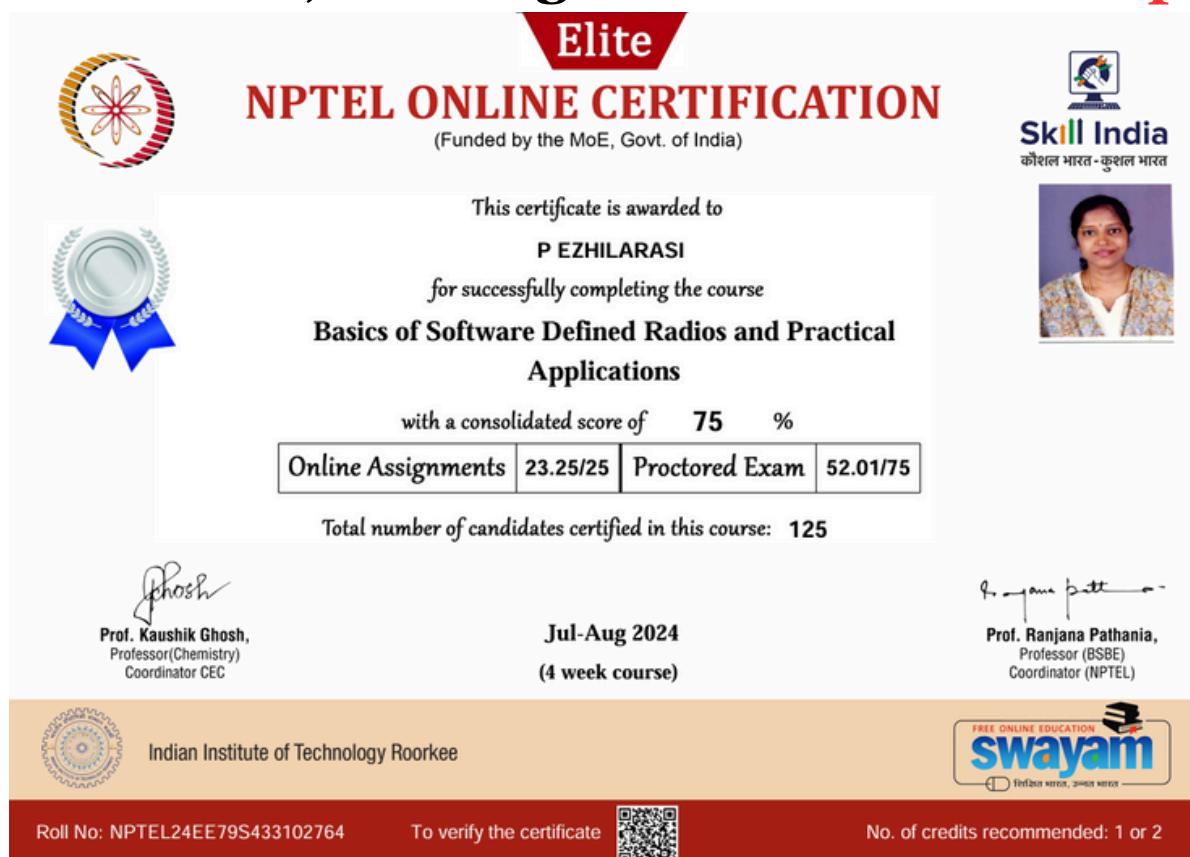


Staff Achievements

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

Dr. P. Ezhilarasi and Dr. S. Rajeshkannan have both excelled in the Basics of Software Defined Radios and Practical Applications course, earning the ELITE SILVER position.



Staff Achievements

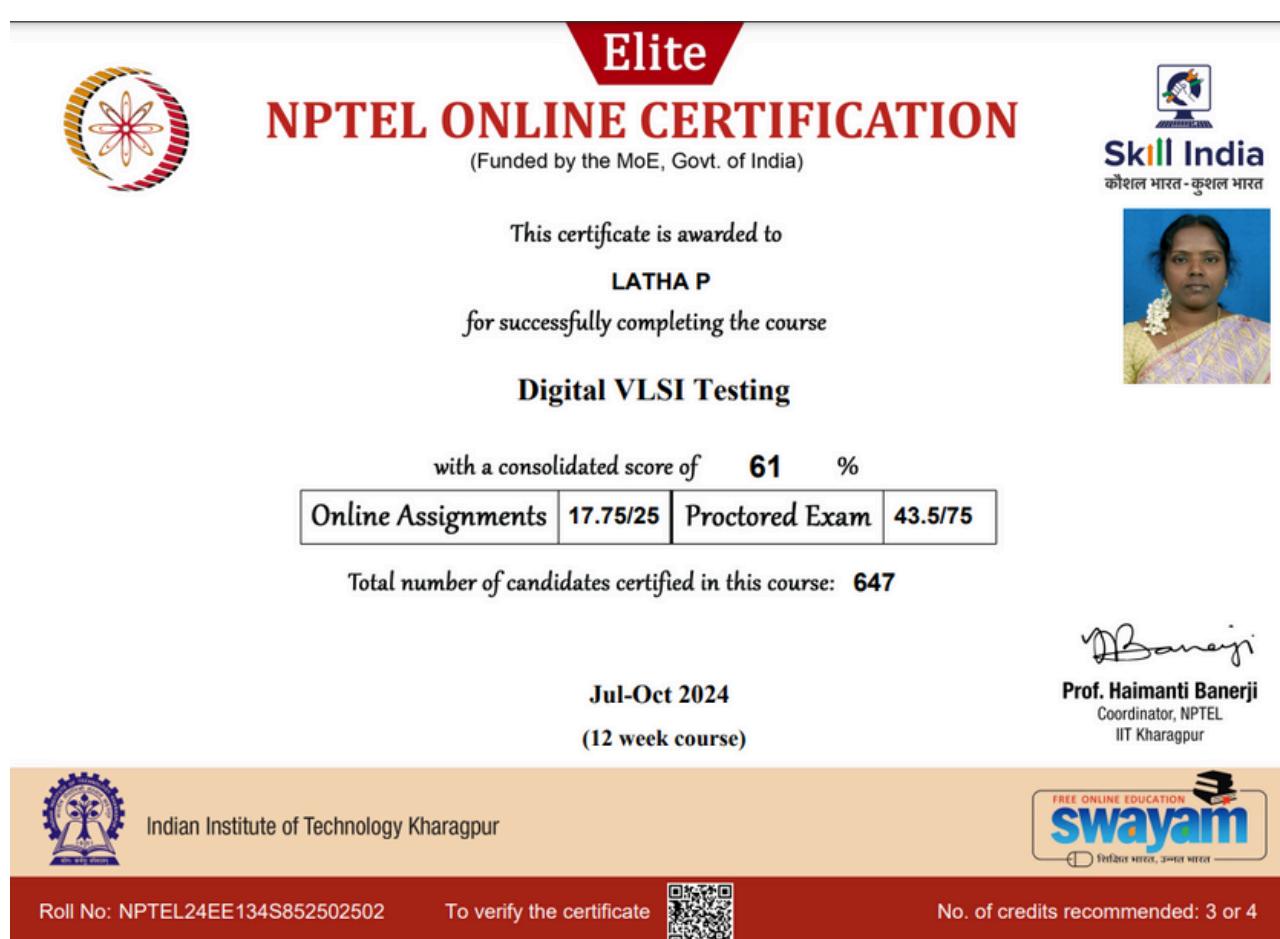
NPTEL Online Certification

(Funded by the MoE, Govt. of India)

Mrs. E. Malarvizhi has successfully completed the Microelectronics: Devices to Circuits course, securing the ELITE position.



Dr.P.Latha has successfully completed NPTEL Course on Digital VLSI Testing securing ELITE Position



Staff Achievements

PUBLICATIONS

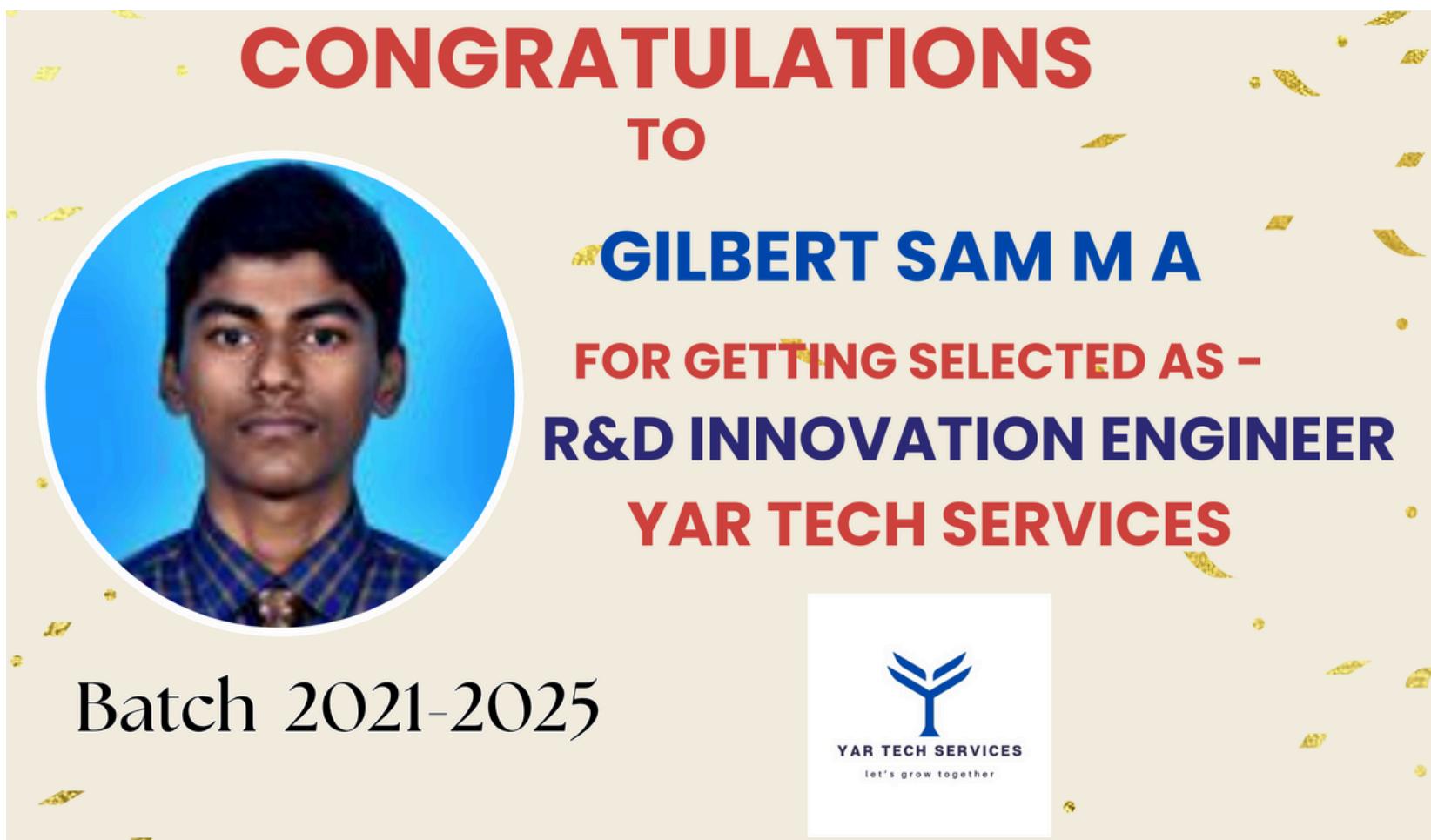
- Rajeshkannan, “Performance Evaluation of PET Foam and Areca Fruit Fibre Reinforced Modified Cellulose-Vinyl Ester Composite on Thermal and Water Ageing Conditions”, Waste And Biomass Valorization (Nov 2024)
- Stalin Aghalya,” A low-cost localization method in autonomous vehicle by applying light detection and ranging technology”, Indonesian Journal of Electrical Engineering and Computer Science, 2024
- S.Aghalya, “Cloud based prediction of epileptic seizures using real-time electroencephalograms analysis” International Journal of Electrical and Computer Engineering, vol 14, no.5, pp. 6047–6056
- Rajeshkannan, S “Load bearing investigations on silane coupling grafted PET core and pineapple leaf fibre-vinyl ester sandwich composite building material”, Polymer Bulletin, (2024)

Classroom to Corporate



Happy to announce that 14 students from the 2021-2025 batch have secured impressive placements at Accenture with a CTC of 4.5 LPA. This remarkable achievement is a testament to their hard work, dedication, and the quality education they received at our institution. We congratulate our talented students and wish them all the best in their future endeavors.

Classroom to Corporate



We are thrilled to announce that Gilbert SAM, a bright and talented student from the 2021-2025 batch, has been selected as an R&D Innovation Engineer at YAR Tech Services. This is a significant achievement that reflects Gilbert's hard work, dedication, and the quality education provided by our institution. We congratulate Gilbert on this well-deserved success and wish him all the best in his future endeavors.

Classroom to Corporate



We are delighted to announce that Vignesh R, a bright and promising student from the 2021-2025 batch, has been selected as a Software Engineer at MITSOGO Technologies. This is a significant achievement that reflects Vignesh's hard work, dedication, and the quality education provided by our institution. We congratulate Vignesh on this well-deserved success and wish him all the best in his future endeavors.

Classroom to Corporate

The banner features the following elements:

- DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING** (in blue)
- Congratulations** (in purple script)
- FOR GETTING PLACED IN** (in purple)
- CTC: 5 LPA** (in purple)
- BENIE JAISON** (name next to a circular profile picture of a man)
- KAITLYN** (name next to a circular profile picture of a woman)
- KALAVAKUNTA SREE PRAVALLIKA** (name next to a circular profile picture of a woman)
- BATCH 2021-25** (in purple)
- AVASOFT SHAPING NEXT GEN** logo (with orange and red stylized letters)
- INSTITUTION'S INNOVATION COUNCIL** (Ministry of Education Initiative) logo (with three stylized human figures)
- NATIONAL SUSTAINABILITY RANKING (NSIR)** logo (a circular emblem with various colors and text)

Celebrating Success! Three of our bright students from the 2021-2025 batch have achieved a significant milestone by securing placements at AVASOFT with a CTC of 5 LPA. We applaud their hard work and dedication.

Classroom to Corporate



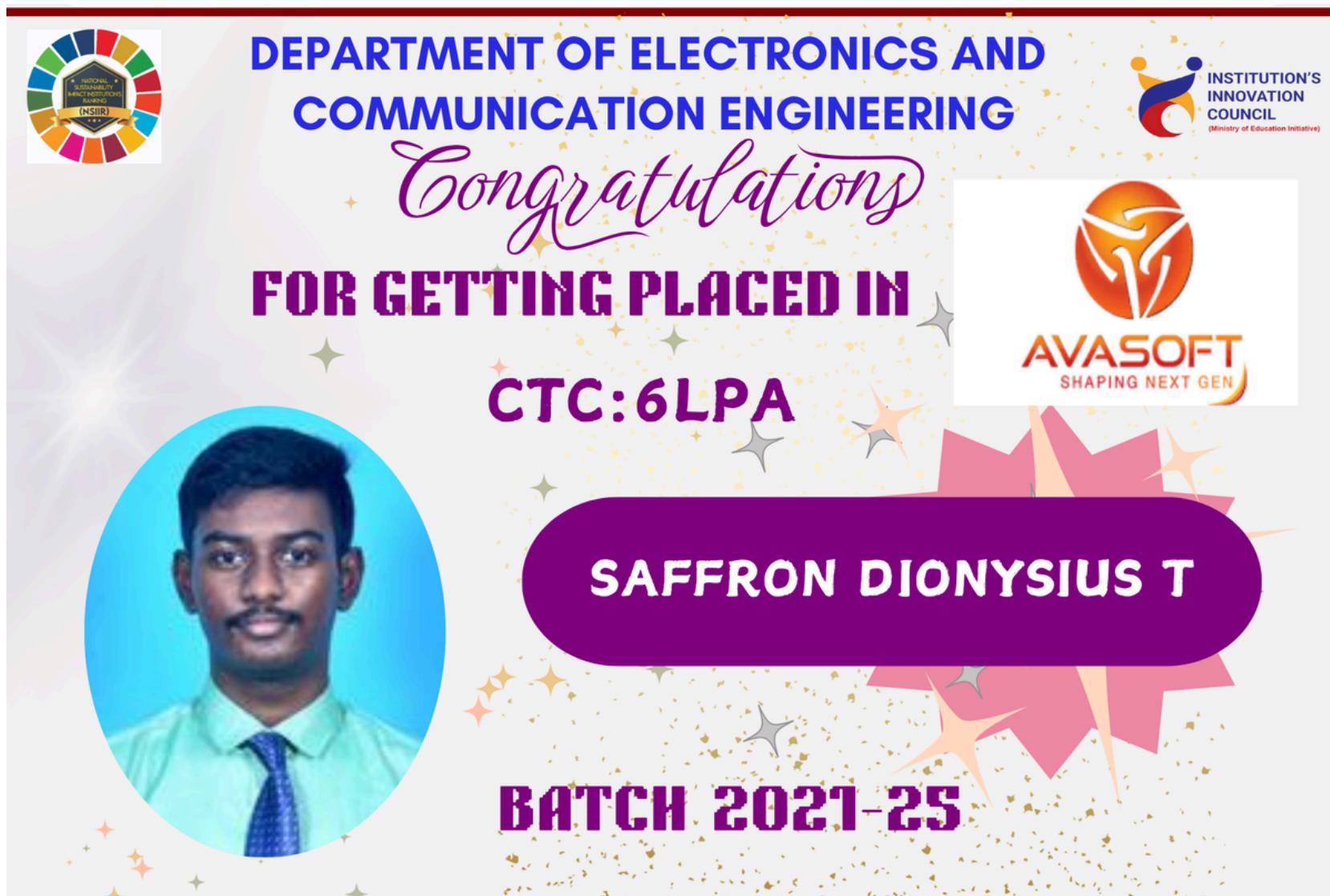
Inspiring the Next Generation! Five of our 2021-2025 batch students have set a high bar by securing placements at LTI Mindtree with a CTC of 4 Lakhs. Their success story motivates aspiring students to strive for excellence.

Classroom to Corporate



We're thrilled to announce that 23 of our bright students from the 2021-2025 batch have achieved a significant milestone by securing placements at Infosys with a CTC of 3.6 Lakhs. This is a testament to their hard work and the quality education they received at our institution.

Classroom to Corporate



Saffron Dionysius T, a talented student from the 2021-2025 batch, has secured a coveted placement at AVASOFT with a CTC of 6 Lakhs. This is a remarkable achievement that reflects Saffron's hard work, dedication, and the quality education provided by our institution. We congratulate Saffron on this well-deserved success and wish them all the best in their future endeavors.

Classroom to Corporate



Six bright sparks from our 2021-2025 batch have ignited their careers at Cognizant GenC! We're thrilled to announce that they've secured placements with a CTC of 4 Lakhs. A testament to their hard work and the quality education they received here. Congratulations to the future leaders!

Classroom to Corporate

 **DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING** 

Congratulations



Ashmithaa G Divyadharshan A P.Edith Praiselin Bhargavi Y R

Jenefa Joy A B Lourdes Teshina J M

4 LPA



Batch 2021-2025

A big congratulations to the 6 talented students from the 2021-2025 batch who have secured placements at Hexaware with a CTC of 4 LPA. Your hard work and dedication have paid off!

TO KNOW MORE ABOUT DEPARTMENT ACTIVITIES

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Click Here

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Scan Here



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[**ECE St. Joseph's Instagram**](#)

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***For Admissions: Visit www.stjosephs.ac.in or Contact +91 9940104881/+91 9940104882**