



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Est. in 3rd UGC Act, 1956)



ANNUAL REPORT

2023 - 24

VOLUME - 03



**Department of Electronics and
Communication Engineering**

SCHOOL OF ELECTRICAL AND COMMUNICATION



FOUNDERS



*Col. Prof. Vel. Dr. R. Rangarajan B.E.
(Elec.), B.E.(Mech.), M.S.(Auto.),
D.Sc. President & Chancellor*



*Dr. Mrs. Sagunthala Rangarajan
M.B.B.S. Foundress President*

FOREWORD



Col. Prof. Dr. Vel. R. Rangarajan
B.E. (Elec), B.E. (Mech), M.S.
(Auto), D.Sc.,

President & Chancellor

&

Dr. Mrs. Sagunthala Rangarajan

M. B. B. S.,

Foundress President

This year has been the most challenging year since Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology was established nearly 26 years ago. Due to circumstances largely beyond our control, our University has been forced to change dramatically. I am delighted to see that the department has demonstrated the best qualities of teaching and learning. I congratulate the whole department, faculty, staff and students who have strived hard to bring achievement to the department and the institution. This is an outstanding department, which offers the opportunity to redesign the world around and make it even more efficient, connected and sustainable. I believe the department educates the students with this state of the art knowledge to transforms the world by designing, building and deploying innovative solutions to real- world problems and provides scope to deliver real impact on the future of the University in India and beyond. I once again congratulate the department and look forward to more of such accomplishments in the future as well.

FOREWORD



***Mrs. Rangarajan Mahalakshmi
Kishore***
*Chairperson & Managing Trustee
Vel Tech*

Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology has been making significant contributions to society since more than two decades, through spreading value-based education keeping the present education system in mind. Department of Electronics and Communication empowers its student with appropriate new age technology mind-set, making them digitally ready for the future, ensuring that students can seize opportunities in this competitive world. The department also provides High-tech infrastructural lab facilities, for students to be acclimatized to proficient work culture and enable them to emerge as well-acclaimed professionals that the industry desires to have. To support teachers, the Connected Learning Hub was launched, providing curriculum resources across all levels. Far-sighted how we pulled together over the past one year, I now feel even more confident about the quality of education being delivered to students in ECE department of this esteemed university and this annual report is the witness of the department achievement. I am delighted to announce this annual report of the Department of Electronics and Communication Engineering, which illustrates the department's assurance of faculty in enriching students' learning through teaching-centered methods the key to excellence in academics and research. I congratulate the department faculty members, staff and students for the defensible growth to attain new heights every year and I wish that the same enthusiasm may be continued.

FOREWORD



Prof. S. Salivahanan
Vice Chancellor
Vel Tech Rangarajan Dr. Sagunthala R&D
Institute of Science and Technology

The department of Electronics and Communication Engineering exemplifies its excellence in education and research. The department offers an outstanding student experience, delivering world-changing research, and ensuring a global reputation for excellence. I am extremely delighted to see a blend of academic pursuits and extra-curricular activities provided by the department which is essential for the personality development of the students. Various club activities have been organised in the department to motivate the students for their self advancement. I am glad to see the students' participation in many at national level competitions addressing to meet the needs of industry and society. Faculty in various domains, carry out research and publish papers in reputed journals with high impact factor. Patents and research proposals are submitted by faculty members and granted by government funding agencies. I convey my heartiest congratulations to my colleagues for their achievements during the academic year 2023 - 24 and to all the students for their great feats in different fields ranging from NCC, NSS and sports too. It is heartening to report that our students have not only participated, but also have won several prizes in various inter-collegiate and national level events. To conclude, I want to encourage faculty and students to continue to make contributions, big or small. I am also delighted to know that faculty and students are reaping the benefits of online learning modules and e-resources. Again, I humbly appeal to the faculty and students to have optimal utilization of these ICT initiatives of e-learning to widen their knowledge base. I am thankful to all the members of the teaching fraternity and non-teaching staff for their extreme contribution and entire support to the organization.

FOREWORD



Dr. R. S. Valarmathi

Professor & Dean SoEC

*Vel Tech Rangarajan Dr. Sagunthala R&D
Institute of Science and Technology*

The goal of the Department of Electronics and Communication Engineering (ECE), School of Electrical and Communication Engineering (SoEC), Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology is to position our Engineering graduates as problem solvers, leaders, life-long learners and honorable citizens of the global community. We offer the best engineering atmosphere with world class facilities, intellectual and technological resources from Educational and Research Institutions for the holistic development of our students. The ECE curriculum is balanced between the practical aspects of Engineering and offers four specialization courses (Artificial Intelligence & Data Science, Artificial Intelligence & Machine Learning, Cybersecurity and IOT) with the strong theoretical and practical foundation, preparing our students to meet the challenges of the global technological society. I am pleased to introduce this Annual Report 2023 - 24 from the Department of Electronics and Communication Engineering. I am proud to note that the faculty members and students have received awards and recognitions by participating in various events outside the institution at national & international levels. This annual report is a unique compilation of activities conducted by the department and also the accolades and glorious achievements of staff and students. I wish this report to be used as a reference guide by the ECE-students to plan and realize their academic life more meaningful and efficient. I wish you all a very rewarding and successful experience at Vel Tech.

FOREWORD



Dr. A Selwin Mich Priyadharson
Professor & Head, Department of ECE
Vel Tech Rangarajan Dr. Sagunthala R&D
Institute of Science and Technology

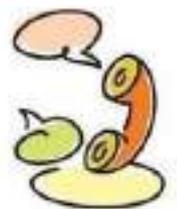
The Department of Electronics and Communication Engineering was established in the year 1997 with a sanctioned intake of 60 students for the B.tech ECE programme . Today the intake stands a 480 ,The B.Tech. ECE program is accredited by NBA under Tier-I. Over the last two decades, we have grown both in infrastructure and expertise in various fields, related to core ECE. The primary focus of our curriculum is to impart technical know-how to students, promote their problem- solving skills and to kindle their innovative thoughts through our Outcome-Based Education (OBE) and Active Teaching & Learning Methods (ALM). Unique focus areas of this department are Automotive Electronics, Network-cyber Security, Artificial Intelligence, Machine Learning, Communication antenna, Embedded Systems, Small Satellites, VLSI and Unmanned Air Vehicles (Drone).The department has a strength of 123 diligent faculty members and has well established research labs in collaboration with industries in the fields of Internet of Things, Signal processing, VLSI, Embedded System Design and RF Communication. An exclusive lab is established to impart “Conceive-design-Implement-Operate” principles among students, thereby nurturing critical thinking, problem-solving and financial-planning skills among students. The students are encouraged to undertake various research projects and associate themselves under different clubs like ACE Club, Programming Club, Robotic Club and EWS Club. The department conducts various workshops, expert talks and training programs on recent trends in ECE, in collaboration with industries for the benefit of faculty and students. The department has a good and consistent placement record with students placed in many core and IT companies. It has active association with professional bodies like IEEE and IETE for both faculty and students to enhance their research activities. I am pleased to present this annual report for the academic year 2023–24. This report covers the summary of all academic and nonacademic activities organized by the department. The details of achievements and accolades received by faculty and students from various technical and non-technical events have been composed to bring an exposure to budding engineers about the opportunities available for them. The particulars of student placement and student internship at various industries and international universities are also enclosed to motivate the ECE students. I hope that, the information provided through this annual report will help them to plan and realize their academic life more progressive.

Table of Contents

<i>1. Department at a Glance</i>	10
<i>2. Department Vision & Mission</i>	11
<i>3. Department Programme Educational Objectives</i>	12
<i>4. About the Programme (B.Tech. ECE)</i>	13
<i>5. Faculty Achievements</i>	18
<i>6. Student's Enrichment</i>	22
<i>7. Student's Achievements</i>	25
<i>8. Events Organized</i>	26
<i>9. Minor and Major Project</i>	51
<i>10. One Credit Courses</i>	55
<i>11. Professional Body</i>	59
<i>12. Department Club Activities</i>	66
<i>13. 2019-2023 Batch Student Internship</i>	68
<i>14. 2018-2022 Batch Student Placement</i>	71
<i>15. Skills Imparted Through Programme Elective</i>	74

DEPARTMENT AT A GLANCE

The Department of Electronics and Communication Engineering was established in 1997, since the inception of the institution. Over the time, the department has emerged in diverse dimensions and affords a spellbound ambience for teaching and learning. The department offers B.Tech. in Electronics and Communication Engineering. M.Tech. in Embedded Systems and Technologies and Ph.D. in ECE degree programme with technology- oriented courses that create industry ready professional in the prudent fields of ECE. All the programme are approved by AICTE and the B.Tech. ECE programme has received Tier -I NBA accreditation for 3 years in the year 2018, valid up to June 2025. The department has been strengthened by its erudite faculty members from reputed universities and organizations. The key areas of research and academic activities in the department are VLSI Design, RF and Microwave Antenna Design, Signal Processing, Image and Video Processing, Embedded Systems Design, Wireless Sensor Networks, Unmanned Aerial Vehicles ,Small Satellites etc. Our department students were selected for the SIH hardware edition Grand Finale Smart India Hackathon 2023 (SIH 2023) at Galgotias University. The department is well- equipped with curriculum based laboratories like Texas Instruments powered IoT & Signal Processing labs, Xilinx powered System on Chip lab, EYantra Embedded Systems. Several initiatives in alliance with international universities and core electronics industries are also given cardinal importance in the department.



18
PROFESSORS

35
ASSOCIATE
PROFESSORS

70
ASSISTANT
PROFESSORS



Department Vision

“To be a Centre of Academic Excellence through quality education and cutting-edge research in diversified fields of Electronics and Communication Engineering to meet the global challenges and produce high quality professionals.”

Department Mission



M1

To enrich the knowledge of graduate engineers for global requirements by promoting quality education through innovative pedagogical practice.

1. Outcome Based Education
2. Active Teaching & Learning
3. Project based Learning
4. Integrated Courses



M2

To create an ambience for academic excellence by engaging in cutting-edge research and undertaking collaborative projects with academia and industry.

1. CDIO projects
2. Funded projects
3. Consultancy projects



M3

To develop competence by inculcating human and moral values with leadership and professional skills

1. Soft Skill Training
2. Value Education Electives
3. Career Ready Practices

Department Programme Educational Objectives

PEO

1

Our graduates will solve contemporary problems in the analysis and design of Electronics and Communication Devices and Systems

PEO

2

Our graduates will conceive ideas for the societal issues and will design, implement and operate the Engineering products for the ideas conceived.

PEO

3

Our graduates will perform in various roles with adequate Technical and Managerial Skills in Design, Development, Production and Support areas of Electronics and Communication and Allied Industries.

PEO

4

Our graduates will pursue higher education and will be lifelong learners in their profession, effectively communicate the technical information and work in multidisciplinary teams.

PEO

5

Our graduates will be ethical, environmental, health and safety concerned in their profession.

About the Programme (B.Tech. ECE)

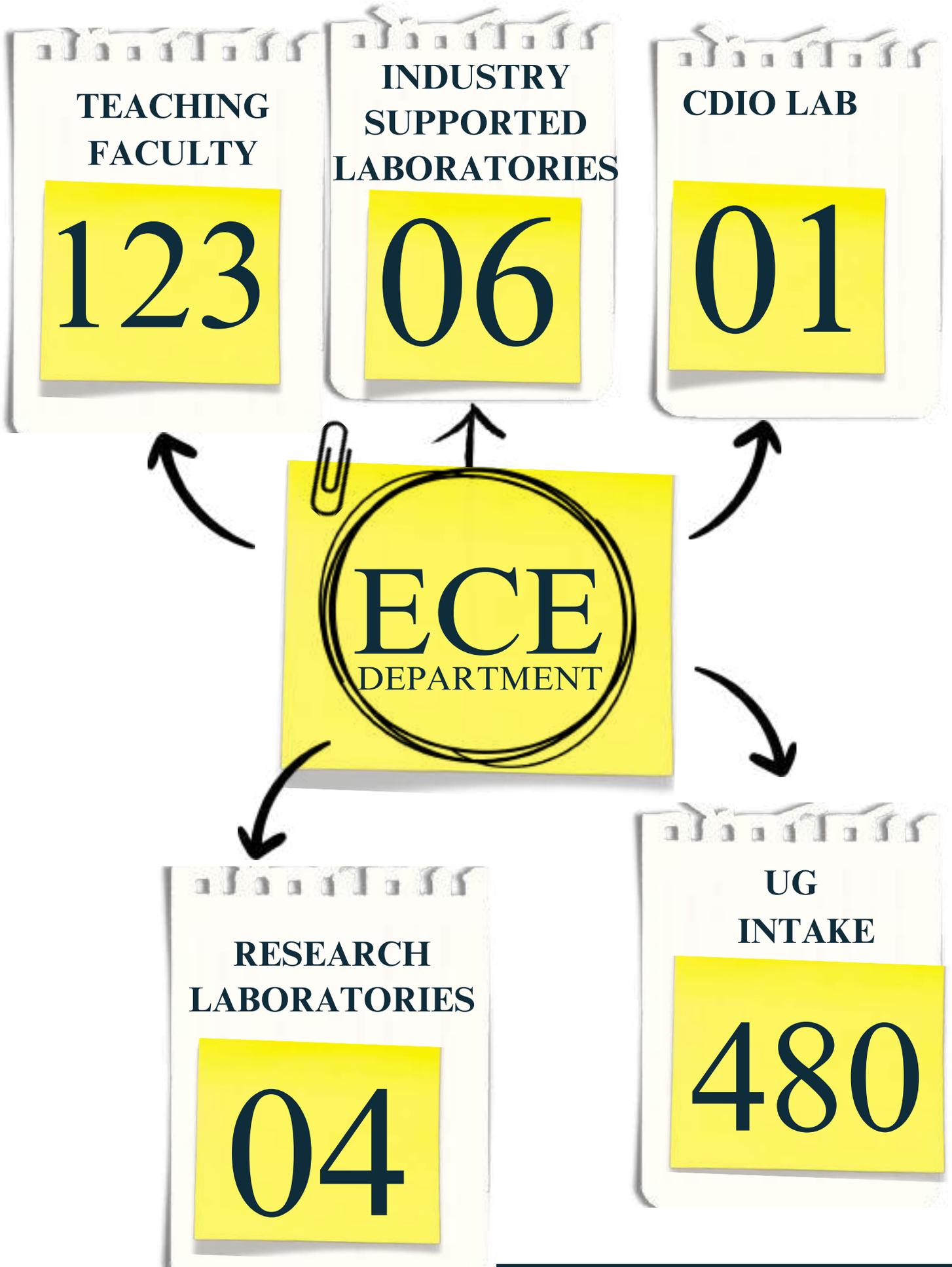
The programme follows Outcome Based Education (OBE), which primarily focuses on knowledge, skills and attitude of the graduates. From the academic year 2015-16 onwards, the academic regulation of the programme follows Choice Based Credit System (CBCS) with academic flexibilities such as (i) Course Choice within the programme (ii) Faculty Choice (iii) Department /School level course choice (iv) MOOC course choice. The programme curriculum (VTU R15) consists of various course categories (Foundation, Programme Core, Programme Elective, Allied Elective, University Elective, Value Education Elective, Independent Learning, Industry/Higher Learning Institute Interaction and Complementary Skill Courses) to provide the depth and breadth required for the programme. Programme electives on contemporary technologies such as Software Defined Networking, Software Defined Radio, Next Generation Mobile Networks, Nano Photonics, Radio over Fiber Systems, System on Chip, Internet of Things were included in the curriculum based on the recommendations from Board of Studies (BOS) and further approved by the Academic Council members. Faculty members and Industry- Experts from top QS ranking institution the USA, Germany and Taiwan as well as reputed organizations delivered one credit courses on contemporary technologies for the students of B.Tech. ECE programme. Faculty members have been facilitating students towards collaborative and cooperative learning through Jig-Saw, Think-Pair-Share, Peer Instruction, Mud Card Flipped Classroom and Problem / Project Based Methods. Since 2018, the programme has facilitated interested final year students who have completed all courses except project work to undergo nine months internships/project work in Industries or international universities. Students admitted from the academic year 2021-2022 follow the new curriculum “VTR UGE-21” (Foundation, Programme Core, Programme Elective/Specialization Elective, Open Elective, Independent Learning, Industry/Higher Learning Interaction and Professional Proficiency Courses). In addition to the various course categories offered in the previous regulation, the new curriculum provide the option of obtaining B.Tech. Degree in ECE with specialization in Artificial Intelligence & Data Science, Artificial Intelligence & Machine Learning, Cybersecurity and Internet of Things.



Lead Society for ECE



DEPARTMENT HIGHLIGHTS



Programmes Highlights



Department of Electronics and Communication is an extremely exciting, challenging and rewarding area of study. It incorporates an excellent combination of theoretical and logical content on the one hand, practical application and societal importance on the other.

Choice Based Credit System
Programmes are based on Choice Based Credit System (CBCS) instead of Fixed Credit System

Flexible Timings Students can prepare their own timetable (choosing course, faculty, slots)

Student Centric Approaches
Student Centric Approaches in Teaching and Learning process

Use Case Approach
in course delivery in the programme

Tracks in Emerging Areas
More specialized emerging relevant areas (AIDS, AIML, IoT, Cyber Security)

Flexibility for Fast Learners
Programmes have the flexibility for fast learners to enhance their skills

Exposure in Research
Involvement of students in the research projects

Student Internship
Provides an opportunity to do full time internship in India and Abroad

Entrepreneurship
Start-up facility for the students through Vel Tech TBI funded by DST

Additional Learning
Additional learning Honours, Minor, along with B.Tech. Degree

Self-Learning & Extracurricular participation
Free time for Self-Learning (20-30 hours/week) & Extra Curricular participation



HISTORICAL HIGHLIGHTS

- Our ECE Department with B.E-ECE was affiliated with the University of Madras in the year of 1997.
- B.E- ECE was affiliated to Anna University, Chennai since 2005.
- M.E.-Embedded System Technologies and M.E-VLSI Design had been affiliated to the Anna University, Chennai since 2005.
- B.Tech- ECE has become part of Deemed to be University in the year of 2009.
- M.Tech- ECE with Embedded System Technologies was added under Deemed to be university in the year of 2016.
- Tier -I NBA B.Tech- ECE 3 years Accreditation in the year of 2018.
- B.Tech-ECE with specialization 1.AIDS 2.AIML 3.CYBER SECURITY in the year 2021. B.Tech -ECE with specialization in IoT was started in the year 2023.
- NBA accreditation was extended and is valid until June 2025.



Value Capital Model

Our department focuses on understanding the needs of students, faculty, researchers, and industry partners, and delivers a curriculum that aligns with those needs and goals.



People
Faculty,
Students



Teaching and learning
Faculty, Students



Infrastructure
Physical Classes, Smart Classes,
Laboratories, Library and Gallery Hall



Network
Academic alliances,
Industry Linkages



Faculty Achievements (2023-24)

COMMUNICATION DOMAIN

- FACULTY - 22
- FACULTY WITH PH.D. - 22
- BOOKS/BOOK CHAPTER - 03
- FDP & Workshops Attended - 47
- FDP & Workshops Organized - 10
- Webinars Attended - 00
- Research Proposals Submitted - 24
- Research Proposals Granted - 01
- Patents Published / Granted - 08
- Publications in WoS Journals - 34
- Publications in Scopus Journals - 08
- Publications in Conferences - 24



EMBEDDED DOMAIN

- FACULTY - 23
- FACULTY WITH PH.D. - 23
- BOOKS/BOOK CHAPTER - 05
- FDP & Workshops Attended - 72
- FDP & Workshops Organized - 17
- Webinars Attended - 06
- Research Proposals Submitted - 11
- Research Proposals Granted - 00
- Patents Published / Granted - 08
- Publications in WoS Journals - 11
- Publications in Scopus Journals - 25
- Publications in Conferences - 59



NETWORKING DOMAIN

- FACULTY - 21
- FACULTY WITH PH.D. - 19
- BOOKS/BOOK CHAPTER - 08
- FDP & Workshops Attended - 04
- FDP & Workshops Organized - 10
- Webinars Attended - 06
- Research Proposals Submitted - 08
- Research Proposals Granted - 00
- Patents Published / Granted - 06
- Publications in WoS Journals - 07
- Publications in Scopus Journals - 09
- Publications in Conferences - 16



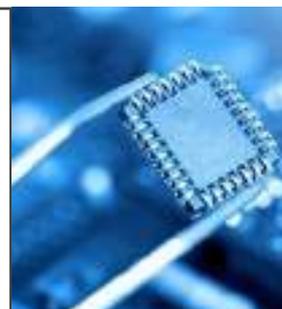
SIGNAL PROCESSING DOMAIN

- FACULTY - 28
- FACULTY WITH PH.D. - 21
- BOOKS/BOOK CHAPTER - 04
- FDP & Workshops Attended - 16
- FDP & Workshops Organized - 10
- Webinars Attended - 01
- Research Proposals Submitted - 22
- Research Proposals Granted - 00
- Patents Published / Granted - 13
- Publications in WoS Journals - 20
- Publications in Scopus Journals - 20
- Publications in Conferences - 56



VLSI DOMAIN

- FACULTY - 25
- FACULTY WITH PH.D. - 19
- BOOKS/BOOK CHAPTER - 02
- FDP & Workshops Attended - 10
- FDP & Workshops Organized - 03
- Webinars Attended - 07
- Research Proposals Submitted - 13
- Research Proposals Granted - 00
- Patents Published / Granted - 03
- Publications in WoS Journals - 12
- Publications in Scopus Journals - 22
- Publications in Conferences - 10



FACULTY ACHIEVEMENTS



Dr.A Selwin Mich Priyadharson, Professor & Head, Department of ECE, received a patent grant for an invention entitled “A wearable device to assist blind and visually impaired people on indoor and outdoor environments” in Intellectual Property India.

Dr.A Selwin Mich Priyadharson, Professor & Head, Department of ECE, received a patent grant for an invention entitled “Design of Automatic Sprinkler for Multi Applications Based on Wireless Sensor Network (WSN)” from Intellectual Property India.



Dr.A. Selwin Mich Priyadharson, Professor and Head of ECE has been a Session Chair in 49th Annual Conference of IEEE IES Chapter, Singapore during 16 to 19 October 2023 and has presented two papers entitled “Online Fuel Measurement and Optimized Combustion Process Control in a Thermal Power Station Boiler” and “Lab VIEW and Deep Learning based Combustion Flame Monitoring and Fuel Flow Measurement in a Thermal Power Station”.

FACULTY ACHIEVEMENTS



Congratulations to our 52 faculty members of ECE department who have successfully completed NPTEL courses offered by various IIT's during October/ November 2023. Four faculty members are the achievers of Topper 1% to 2%.

Dr.S.Jana, Professor, has secured a topper in the NPTEL course titled “Fuzzy sets, Logic and Systems & Applications” with Elite + Gold certificate.



Ms.K.J.Subha, Assistant professor has obtained Elite + Gold certificate for the NPTEL course titled “Fuzzy sets, Logic and Systems & Applications”

FACULTY ACHIEVEMENTS - FUNDING/ REWARDS



Dr.A. Selwin Mich Priyadharson, Professor and Head of ECE has received an amount of Rs.26,089 from **Science & Engineering Research Board (SERB) under Grant-in-aid General** for meeting the expenses in participating the IEEE IES Chapter, Singapore during 16 to 19 October 2023.

Under IEEE Student Branch

In acknowledgement of exceptional operational excellence throughout the calendar year of 2022, Vel Tech's IEEE Student Branch was honoured with a \$294 as “**Student Branch Operating Funds**” by IEEE Member and Geographic Activities (IEEE MGA). This serves to bolster the continuation of various IEEE-related student activities, as the sum was duly credited to the student branch account.

IEEE Signal Processing Society

Vel Tech's IEEE SPS Student Branch Chapter achieved recognition for its continuous efforts in fostering membership growth within the Signal Processing Society since 2021. This dedication resulted in the award of \$250 as a “**Membership Growth Reward**”, which was promptly credited to the IEEE Student Branch account, further fuelling initiatives and activities aimed at enhancing the IEEE SPS community. The Chapter Advisors are Dr. S. G. Rahul, Assistant Professor, ECE and Ms. Subha K.J, Assistant Professor.

IEEE Communication Society

Pending reception, Vel Tech's IEEE Communication Society Student Branch Chapter of Vel Tech awaits the commendation of a \$500 as “**Membership Retention Award**” from the IEEE Communication Society. This award recognizes the chapter's outstanding efforts in retaining and engaging its membership, highlighting its commitment to fostering a vibrant and connected community within IEEE. The Chapter Advisor is Dr. C. Kanmani Pappa, Associate Professor.

IEEE Industrial Electronics Society

With an eye toward future development, the newly approved Vel Tech's IEEE Industrial Electronics Society Student Branch Chapter successfully submitted a request for seed funding to IEEE IES. This request was met with approval, securing a \$200 as “**Seed Fund**” aimed at seeding the future growth and evolution of the chapter and it is pending reception. This support promises to pave the way for innovative advancements and expansions within the IEEE community at Vel Tech. The Chapter Advisor is Dr. R. Rajkumar, Associate Professor.

Student Learning Experience

- Modern Learning Approaches

Our focus is to enhance student's learning and overall experience by implementing interconnected pillars within our educational framework. We achieve this by continuously improving our curriculum and adopting student-centric teaching and learning methods. We offer tutoring and academic counselling services to support students in their academic journey. Additionally, we provide tools and resources that help students to effectively manage their goals and progress. Our commitment is to empower students and guide them toward achieving their academic aspirations.



Learn-Everything hangs on quality content. Industry and professional standards guide the content of courses and programs.



Practice-Students practice through assignments, often integrating their work experience.



Apply-Students apply their knowledge to real world problems, helping them move towards career goals.



**OUR KEY IS
“TRANSFORMING
ENGINEERING
EDUCATION”**



Student Learning Path



The Department of Electronics and Communication Engineering empowers all students to access and compete in equally rigorous pathways that enable exploration of career interests while gaining the knowledge and skills necessary for success in the workforce and higher studies. Opportunities such as project-based learning, internships, and experiential learning activities are paired with support to address achievement gaps and ensure that every student can advance to deeper levels of mastery regardless of their starting point.



1st
Year

Foundations in Mathematics,
Science and Engineering

2nd
Year

Circuit Theory, Signals & Systems,
Digital Electronics, Analog Electronics
and Discrete time signal processing



3rd
Year

Skills required for Projects, Emerging areas
and Employment



4th
Year

Innovative Project development, Industry
ready and Career Guarantees



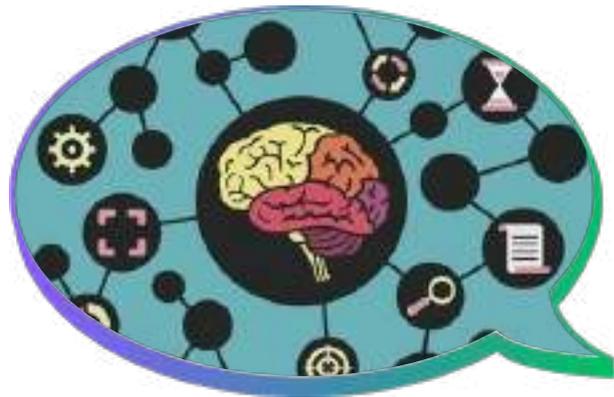
Student Centric Methods

-Modern Learning Approaches

The Department of Electronics and Communication Engineering employs a teaching methodology centered around students, where education is imparted through an active and engaging approach. This methodology aims to shift students from passive recipients of knowledge to active participants in their own learning.



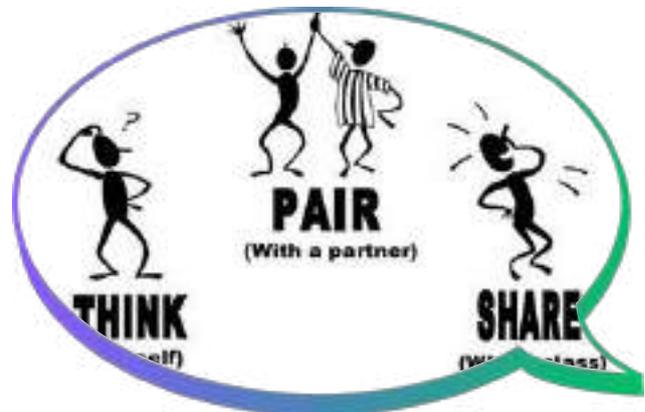
JIGSAW PUZZLE



MIND MAPPING



QUIZ



THINK PAIR SHARE



GROUP PEER LEARNING



MINUTE A PAPER

Student Achievements (2023-24)



STUDENT ACHIEVEMENTS (2023-24)



#moments

Events Organized (2023-24)

“Internet of Things using Arduino”

Vel Tech
Vengal Rao Dr. Sagunthala
Vellore Institute of Technology

School of Electrical & Communication Engineering
Department of Electronics and Communication Engineering
Networking Domain
cordially invites you for the

Three Day Workshop on

“Internet of Things using Arduino”

DATE: 07th - 09th MARCH 2024
TIME: 10:00 AM TO 04:00 PM

RESOURCE PERSON
Dr. B. Ezhilavan,
Founder & CEO,
VEI TECHNOLOGIES PVT. LTD.,
Chennai

In the presence of
Col. Prof. Vel. Dr. R. Rangarajan
Former President & Chancellor
Dr. Sagunthala Rangarajan
Founder President
Prof. S. Srinivasan
Vice Chancellor

Co-ordinators
Dr. C. Ezhilashagan, Assistant Professor - ECE
Dr. J. Anuraj Kumar, Assistant Professor - ECE

Repertoire link: <https://forms.gle/pV8N17R6ACqTqFA>

Phone: 1800 222 7660
Website: www.vvit.edu.in
No.42, Avadi - Vr/Thiruvonam Road, Vel Nagar, Avadi, Chennai - 600 062

The Department of Electronics and Communication Engineering (ECE) recently hosted a three-day workshop on "Internet of Things using Arduino" from March 7th to 9th, 2024. The workshop featured hands-on training sessions focused on Arduino-based interfacing, catering to a group of 50 participants.

This immersive approach allowed attendees to gain valuable experience in integrating smart applications, enhancing their understanding of various interfacing systems. The workshop proved highly beneficial, equipping participants with the knowledge and skills needed to tackle real-time challenges in IoT applications. By fostering a dynamic learning environment, the program empowered students to explore the potential of IoT technology and its practical implementation.

Overall, the workshop served as a valuable opportunity for participants to deepen their expertise in IoT using Arduino, paving the way for innovative solutions and advancements in the field of electronics and communication. With 7 years of experience at VEI Technologies, **Dr. B. Ezhilavan** brings a wealth of expertise in documentation content creation, and knowledge dissemination.

The workshops were meticulously designed to equip participants with the skills, tools, and methodologies needed to elevate their hands on practices to new heights. Through a blend of engaging presentations, interactive exercises, and practical case studies, **Dr. B. Ezhilavan** enhances the art of design, empowering participants to capture, organize, and communicate information effectively. From creating prototype designs and instructional guides to developing user-friendly templates and digital repositories, attendees gain invaluable insights into optimizing their design processes for maximum impact.

Moreover, **Dr. B. Ezhilavan** understands the importance of tailoring workshops to meet the specific needs and objectives of each organization. Whether you're looking to improve internal communications, standardize operating procedures, or enhance training materials, **Dr. B. Ezhilavan** can customize a workshop that addresses unique challenges and goals.

By partnering with **Dr. B. Ezhilavan**, can expect more than the workshop also its an armed with practical strategies, proven methodologies, and expert guidance, participants will emerge equipped to drive meaningful change, foster collaboration, and propel your organization towards greater efficiency and success.



The Department of Electronics and Communication Engineering (ECE) recently hosted a three-day workshop on "Internet of Things using Arduino" from March 7th to 9th, 2024. The workshop featured hands-on training sessions focused on Arduino-based interfacing, catering to a group of 50 participants.

Events Organized (2023-24)

“Industry 5.0 for Health Care 5.0”

Vel Tech
Rangarajan Dr. Sagunthala
SCHOOL OF ELECTRICAL AND COMMUNICATION
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
Cordially invites you for the
All India Council for Technical Education (AICTE)
Training and Learning (ATAL) Academy
Sponsored
Advanced level
Faculty Development Programme
on
“Industry 5.0 for Healthcare 5.0”
Date : 20.11.23 to 25.11.23 (Offline)
In the presence of
Col. Prof. Vel. Dr. R. Rangarajan
Founder President & Chancellor
Dr. Sagunthala Rangarajan
Foundress President
Prof. S. Sathyanathan
ECE Gallery Hall (1601)
Co-ordinators
Dr. E. D. Ramesh Babu, Professor & Head

The AICTE ATAL FDP on “Industry 5.0 for Healthcare 5.0” held at the ECE Gallery Hall of Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology was a comprehensive exploration of the integration of Industry 5.0 principles into the healthcare sector. The “Industry 5.0 for Health Care 5.0” program was conducted as an offline face-to-face event from November 20th to November 25th, 2023, from 9:30 am to 5:30 pm. The program featured a comprehensive schedule of activities, including sessions, discussions, teaching practices, industrial visits, and article discussions, aimed at exploring the convergence of Industry 5.0 and Healthcare 5.0.

The program included a diverse range of topics, such as Industry 5.0 technology capabilities in robotics, human-machine collaboration in healthcare, emerging trends and future directions in Industry 5.0, personalized medical manufacturing, sustainable healthcare, and AI in healthcare diagnostics. These topics were facilitated by esteemed resource persons, including Dr. Mohanasankar Sivaprakasam, Dr. A. Srinivasu, Dr. A. Suresh Kumar, and Dr. V. Prithviraj, among others, providing participants with valuable insights and expertise in the field.

Additionally, the program incorporated practical elements, including teaching practice sessions, industrial visits to CSIR-Central Leather Research Institute in Chennai, and article discussions, allowing participants to gain real-world exposure and engage in hands-on learning experiences.

A total of 45 participants actively registered and participated in the event, contributing to the success and enriching discussions throughout the program. The participants demonstrated a high level of engagement and enthusiasm, actively contributing to the sessions, discussions, and problem-solving project sessions.

Overall, the “Industry 5.0 for Health Care 5.0” program was a resounding success, providing participants with a holistic and comprehensive exploration of the intersection between Industry 5.0 and Healthcare 5.0, and fostering valuable networking and learning opportunities for all involved.



The AICTE ATAL FDP on “Industry 5.0 for Health Care 5.0” held at gallery hall of ECE from November 20th to 25th 2023. A total of 45 participants actively registered and participated in the event, contributing to the success and enriching discussions throughout the program.

“Exploring Emerging Trends In Embedded Systems And Automation”



School of Electrical & Communication
Department of Electronics and Communication Engineering Embedded Domain

in association with

IEEE Circuits and Systems Society, Madras Chapter
IEEE Circuits and Systems Society Students Chapter, Vel Tech

Organizes

“Exploring Emerging Trends In Embedded Systems And Automation”

EVENT REPORT

The Department of Electronics and Communication Engineering (ECE) successfully organized a five-day workshop on “Exploring Emerging Trends in Embedded Systems and Automation” from 4th to 8th March 2024. The primary objective of the workshop was to provide students with practical exposure and insights into modern embedded technologies and automation systems. The program featured hands-on training sessions on key technologies such as LabVIEW, microcontroller interfacing, and FPGA-based architecture. These sessions were designed to offer participants a strong foundation in both theoretical concepts and real-time implementation techniques. Students actively engaged in various practical activities, gaining valuable experience in developing and integrating smart applications. The workshop enhanced their understanding of interfacing systems involving sensors and actuators, which are fundamental components in embedded and automation systems.

This immersive learning experience enabled participants to strengthen their problem-solving abilities and gain confidence in handling real-time challenges in automation and IoT applications. The exposure to industry-relevant tools and technologies helped bridge the gap between academic learning and practical application. Furthermore, the workshop fostered a dynamic and interactive learning environment, encouraging collaboration and innovation among students. It empowered them to explore the vast potential of embedded systems technology and its practical implementation across various modern industries. Overall, the workshop was highly successful and proved to be extremely beneficial for all participants, contributing significantly to their technical knowledge and skill development.

The Department of Electronics and Communication Engineering (ECE) organized a five-day workshop on “Exploring Emerging Trends in Embedded Systems and Automation” from March 4th to 8th, 2024.

Events Organized (2023-24)

“VLSI Chip Design”



Extend Hearty Welcome to
Prof. Dr. Po-Ming Lee
Southern Taiwan University of Science and Technology, Taiwan

for delivering the value added course
on
**“VLSI
Chip Design”**

24.01.2024
to
27.01.2024

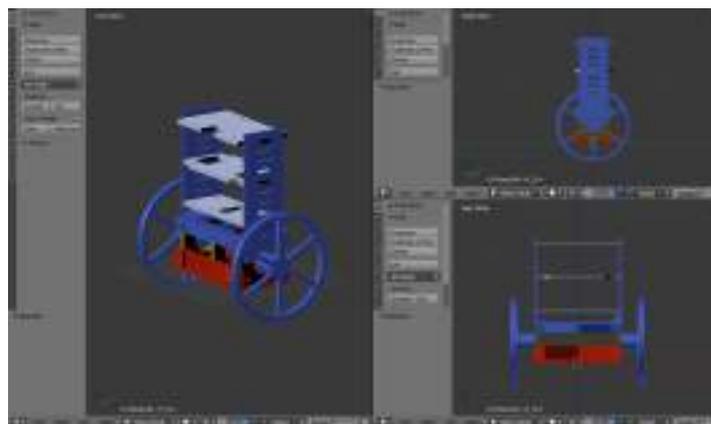
Gallery
Hall

Organized by: Office of International Relations & Department of Electronic and Communication Engineering



School of Electrical & Communication
Department of Electronics and Communication Engineering
organized by
Office of International Relations and Department of Electronics and Communication Engineering
Organizes
**“VLSI Chip Design”
EVENT REPORT**

The Department of Electronics and Communication Engineering (ECE) organized a 4-day Value-Added Course on “VLSI Chip Design” from 24th to 27th January 2024. The program was conducted with the objective of providing in-depth knowledge and practical exposure to students in the field of Very Large Scale Integration (VLSI) design. A total of 60 participants actively took part in the course. The program included hands-on training sessions using Cadence tools, enabling students to gain practical experience in industry-standard design methodologies. The sessions were designed to bridge the gap between theoretical concepts and real-world applications in chip design. The course covered various important domains such as digital systems, signal processing, image processing, and bio-signal processing, helping participants understand the interdisciplinary applications of VLSI technology. Through this comprehensive approach, attendees were able to explore the complete design flow of integrated circuits, ranging from Register Transfer Level (RTL) design to physical implementation. The 30-hour intensive training program proved to be highly beneficial for the participants. It enhanced their technical knowledge and equipped them with essential practical skills required to tackle modern challenges in the design and manufacturing of electronic devices such as microprocessors and memory chips. Furthermore, the program fostered a collaborative learning environment, encouraging students to engage in hands-on activities and interactive sessions. The exposure to advanced tools and techniques empowered the participants to better understand the critical role of VLSI in the semiconductor industry. Overall, the Value-Added Course on “VLSI Chip Design” was a great success, significantly contributing to the academic and professional development of the students.



The Department of Electronics and Communication Engineering (ECE) organized a four day Value-Added Course on “VLSI Chip Design” from January 24th to 27th, 2024.

“Valedictory Ceremony Event”



The banner features logos for IEEE, Vel Tech, IEEE Signal Processing Society, IEEE ComSoc, CAS, Industrial Electronics, and IEO. It includes the text: "School of Electrical and Communication Department of Electronics and Communication Engineering in association with IEEE SPS, IEEE ComSoc, IEEE CAS & IEEE IES - Student Branch Chapters, Vel Tech". The main title is "Valedictory Ceremony IEEE Student Branch Chapter Activities". Below the title are icons of a certificate and a trophy. A blue box at the bottom right contains the date and time: "Date: 28.03.2024 Time: 11.30 am to 12.30 pm".



This banner is similar to the one on the left but includes a "CATEGORY 1" logo from UGC. It also lists "IEEE Signal Processing Society" and "IEEE ComSoc". The text is: "School of Electrical & Communication Department of Electronics and Communication Engineering in association with IEEE SPS, IEEE ComSoc, IEEE CAS, IEEE IES - Student Branch Chapters, Vel Tech Organizes 'Valedictory Ceremony for IEEE Student Branch Chapter Activities'". Below this is the heading "EVENT REPORT".

The Valedictory Ceremony for IEEE Student Branch Chapter Activities organized by the School of Electrical & Communication, Department of Electronics and Communication Engineering in association with IEEE SPS, IEEE ComSoc, IEEE CAS, IEEE IES - Student Branch Chapters, Vel Tech, was held on March 28, 2024. The event aimed to acknowledge and celebrate the achievements and contributions of the IEEE Student Branch Chapters. The event commenced with a warm Welcome Address delivered by Dr. A. Selwin Mich Priyadharsan, Head of Department - ECE, Vel Tech. Dr. Priyadharsan extended a heartfelt welcome to all attendees and emphasized the significance of the event in recognizing the remarkable efforts of the IEEE Student Branch Chapters. Ms. Sahaja Chowdary, Secretary of IEEE SPS Student Branch Chapter at Vel Tech, provided insights into the activities and initiatives undertaken by the IEEE Student Branch Chapters of ECE, shedding light on their mission and vision. Ms. Valli Sri Subrahmanyeswari, Vice Chair of IEEE CAS Student Branch Chapter at Vel Tech, presented the Annual Report of IEEE Student Branch Chapter Activities. She highlighted the achievements, events, and collaborations that shaped the successful journey of the chapters throughout the year. A Special Address was delivered by Dr. R. S. Valarmathi, Dean of the School of Electrical & Communication at Vel Tech. Dr. Valarmathi commended the dedication and commitment of the IEEE Student Branch Chapters and emphasized their pivotal role in fostering academic excellence and professional development among students. The highlight of the event was the Prize and Certificate Distribution ceremony, where outstanding contributors and achievers were recognized and honoured for their exemplary performance and significant contributions to the IEEE Student Branch Chapters. Dr. Rahul S G, IEEE Coordinator - ECE, Vel Tech, extended the Vote of Thanks, expressing gratitude to all participants, organizers, and supporters who contributed to the success of the event. He reiterated the importance of continued collaboration and engagement to further enhance the endeavours of the IEEE Student Branch Chapters. The Valedictory Ceremony served as a platform to acknowledge and celebrate the accomplishments of the IEEE Student Branch Chapters while fostering a spirit of innovation, collaboration, and excellence within the academic community. The event concluded on a positive note, inspiring attendees to continue their pursuit of knowledge and excellence in the field of Electronics and Communication Engineering.



The Valedictory Ceremony for IEEE Student Branch Chapter Activities was organized by the School of Electrical & Communication, Department of Electronics and Communication Engineering, in association with IEEE SPS, IEEE ComSoc, IEEE CAS, and IEEE IES Student Branch Chapters, Vel Tech, on March 28th, 2024.

Events Organized (2023-24)

“A Generic Approach to Artificial Intelligence and Machine Learning”



Vel Tech
Vellore Institute of Technology
School of Electrical & Communication
Department of Electronics and Communication Engineering
Embedded Domain
cordially invites you for the
four days Value Added Course on

“A Generic approach to Artificial Intelligence and Machine Learning”

DATE
25th to 28th MARCH 2024

Time
10.00 am - 4.00 pm

Smart Class Room - 1524

Convenors
Dr. R. S. Valarmathi,
Dean - SoEC
Dr. A. Selwin Mich Priyadharsan,
HoD - ECE

COORDINATORS
Dr. R. Nanmanan,
Associate Professor / ECE
Dr. M. ManimaraBoopathy,
Assistant Professor / ECE

RESOURCE PERSON
Ms. Jwalitha Kumar,
Associate Software Engineer,
Torry Harris Integrated Solutions,
Bangalore

In the presence of
Col. Prof. Vel. Dr. R. Rangarajan
Founder President & Chancellor
Dr. Sagunthala Rangarajan
Foundress President
Prof. S. Salivahanan
Vice Chancellor

Contact
1800 212 7669

Website
www.veltech.edu.in

Address
No. 42, Avadi - Vel Tech Road,
Vel Tech, Avadi, Chennai - 600 062



**School of Electrical & Communication
Department of Electronics and Communication Engineering Embedded Domain**
Organizes
“A Generic Approach to Artificial Intelligence and Machine Learning”

EVENT REPORT

The Department of Electronics and Communication Engineering (ECE) successfully organized a four-day Value-Added Course on “A Generic Approach to Artificial Intelligence and Machine Learning” from 25th to 28th March 2024. The course aimed to provide participants with a strong foundation and practical exposure to emerging technologies in Artificial Intelligence (AI) and Machine Learning (ML). A total of 43 participants actively attended the program. The course included hands-on training sessions focusing on Python programming, predictive modeling, and AI implementation, enabling students to gain real-world experience in building intelligent systems. Through this analytical and practical approach, participants developed a deeper understanding of both fundamental and advanced concepts in AI and ML. The sessions highlighted how data-driven algorithms can be applied to solve complex problems and drive innovation across various industries. The program proved to be highly beneficial, equipping participants with the technical knowledge and problem-solving skills required to address real-time challenges in today's digital era. The exposure to modern tools and methodologies helped bridge the gap between theoretical learning and practical application. Furthermore, the course fostered a dynamic and interactive learning environment, encouraging students to actively participate, collaborate, and experiment with new ideas. It empowered them to explore the vast potential of machine learning technologies and their practical implementation in real-world scenarios. Overall, the Value-Added Course was a great success, significantly contributing to the academic growth and skill enhancement of the participants.



The Department of Electronics and Communication Engineering (ECE) organized a four-day Value-Added Course on “A Generic Approach to Artificial Intelligence and Machine Learning” from March 25th to 28th, 2024.

Events Organized (2023-24)

“Exploring Data insights and Business Values using Machine Learning Techniques”



School of Electrical and Communication
Department of Electronics and Communication Engineering

30 Hours Value Added Course

“Exploring Data Insights and Business Values using Machine Learning Techniques”

Date: 14.03.2024, 15.03.2024, 18.03.2024 and 19.03.2024 Time: 9:00 am to 4:30 pm

Resource Person (Day 1): Dr. S. Jana, Ms. Subha K J, Dept of ECE, Vel Tech.

(Day 2) Mr. Aswath, Mr. Imran Javeed, Dept of ECE, Vel Tech.

(Day 3 & 4): Mr. GB Pon Manivannan

Consulting and Advisory Role Capability in Technology,
Former Head, Technology Solutions, L&T , Chennai.

Targeted Audience : II & III year General ECE Students

Participants : 22

About the event

Day 1 on "Exploring Data Insights" course was handled by Dr. S. Jana, Professor, Department of ECE, Vel Tech. In the session, fundamentals of Machine Learning and data Science were thought. Machine learning techniques offer powerful tools to uncover patterns, trends, and relationships within data, thereby unlocking valuable insights that can drive informed decision-making and enhance business outcomes. Next session was handled by Ms. Subha K J, Assistant Professor, ECE, Vel Tech, gave a hands-on sessions on numpy, Indexing and Slicing. Also, the students had a hands-on session on Pandas and Descriptive Statistics.

Day 2 deals with Data cleaning and Data wrangling which was handled by Mr. Aswath, Assistant Professor, ECE, Vel Tech. The afternoon session was handled by Mr. Imran Javeed on the topics visualization libraries such as matplotlib and charts with seaborn algorithms. Data exploration is the process of analyzing and visualizing data to discover patterns, anomalies, and correlations. Traditional methods often fall short when dealing with large, complex datasets, making it challenging to uncover hidden insights. The session also gave hands-on experience to the students.

On Day 3 and Day 4, Mr. Pon Manivannan, an experienced resource person in data science gave a detailed explanation on Machine learning and its algorithm. Machine learning, however, excels in handling such data by leveraging algorithms capable of identifying intricate patterns that might be overlooked by human analysts. By applying machine learning techniques such as clustering, classification, regression, and anomaly detection, businesses can gain deeper insights into their data. Clustering algorithms, for instance, enable organizations to group similar data points together, providing a clearer understanding of different segments within their customer base or identifying patterns in product sales. Classification algorithms can be utilized to categorize data into predefined classes, helping businesses make predictions or decisions based on past observations. Regression analysis, on the other hand, facilitates the prediction of numerical outcomes, such as sales forecasts or customer lifetime value. Additionally, anomaly detection algorithms are instrumental in identifying outliers or irregularities in data, which could indicate potential fraud or operational issues.



The Department of Electronics and Communication Engineering (ECE) recently hosted a four-day value-added course on "Exploring Data Insights and Business Values using Machine Learning Techniques" from March 14th to 19th, 2024.

Events Organized (2023-24)

“Navigating the Cyber Landscape Understanding Cyber Threats & Best Practices”

Vel Tech
Rangarajan Dr. Sagunthala
School of Electrical & Communication
Department of Electronics and Communication Engineering

Cordially Invites you for the Networking Session Organized by
Guest Lecturer
"Navigating the cyber Landscape Understanding Cyber Threats & Best Practices"
23.01.2024 @ 10.00 am to 12:30 pm
ECE Gallery Hall (1601)

Col. Prof. Vel. Dr. R. Rangarajan
Founder President & Chancellor

Dr. Sagunthala Rangarajan
Foundress President

Prof. S. Salivahanan
Vice Chancellor

Mr. ABHISHEK RALU
Information Security Consultant,
I-CBS Automation Private Limited, Chennai

Address:
Dr. R. S. Valarmathi, Dean - SoEC
Convener:
Dr. A. Selvaraj Prabhakaran, HoD - ECE

Co-Organizer:
Dr. B. Balaji Prasad, Professor / IIT,
Dr. S. Srinivasan, Associate Professor / IIT

Vel Tech
Rangarajan Dr. Sagunthala
School of Electrical and Communication
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Guest Lecture on 23-01-2024

“Navigating the Cyber Landscape Understanding Cyber Threats & Best Practices”

The Department of ECE has conducted the Guest Lecture on “Navigating the cyber landscape Understanding Cyber Threats & Best Practices” on 23.01.2024.

- ✓ Cybersecurity is the hottest area of focus in this digital era. Securing the cyber landscape is the need of the hour.
- ✓ Standards for securing the data and assets are established by recognized bodies.
- ✓ They provide specific requirements, guidelines, and best practices for implementing cyber security controls.
- ✓ Standards are often developed through a consensus-based process involving experts in the field.
- ✓ Compliance with standards can be voluntary or mandated by regulatory bodies.
- ✓ Lack of dedicated cyber security teams or personnel with expertise in cyber security, inadequate or outdated security measures in place and less aware of the latest cyber security threats and best practices has led to 43% of all cyber-attacks in small businesses.
- ✓ Stolen data, exposed sensitive customer information and significant damage to the operations and reputations of the companies is the area of concern.
- ✓ The basic knowledge on Vulnerability Assessment and Testing Tools will lead to securing the cyber landscape.



The Department of ECE has conducted the Guest Lecture on “Navigating the cyber landscape Understanding Cyber Threats & Best Practices” on 23.01.2024.

Events Organized (2023-24)

“5G and Beyond Communication: Algorithms and Implementation”

The poster is for a five-day workshop organized by the IEEE Communications Society Student Branch Chapter at Vel Tech. It features logos for IEEE ComSoc, Vel Tech, and the AICTE ATAL FDP. The text provides details about the workshop's focus on AI-enabled 5G and 6G, the dates (04.03.2024 - 08.03.2024), and the location (NL Lab - Research Park). It lists two keynote speakers: Dr. Mohammad Adhameed Laskar and Dr. Shashank Shekhar. The event is presided over by Col. Prof. Vel. Dr. R. Ranganajan, Dr. Sogunthala Ranganajan, and Prof. S. Sathyashan.

ABOUT THE WORKSHOP
This workshop on AI-enabled 5G communication was a specialized event aimed at exploring the intersection of artificial intelligence (AI) and 5G/6G generation (5G) wireless communication technologies. The following fundamental aspects are covered during the workshop:
Overview of AI and 5G: The workshop was begun with an overview of both AI and 5G technologies, covering their basic principles, current state-of-the-art developments, and potential applications.
Integration of AI with 5G: In the second and third days, participants were introduced to how AI can enhance various aspects of 5G communication, such as network optimization, resource allocation, spectrum management, and quality of service (QoS) improvements.
Research Trends and Challenges: Discussion was made to explore the current research trends, emerging challenges, and open research questions in the field. This could spark collaboration or identify areas for further investigation.
Industry Perspectives: Our representative from industry shared his perspective on the adoption of AI in 5G networks, discussing practical considerations, market trends, and business opportunities.
Applications of AI tool to improve the 5G communication:
Case studies are shared to illustrate real-world applications of AI in 5G networks, which include smart cities, autonomous vehicles, industrial automation, healthcare, image processing and more. This workshop had a number of sessions where participants gained hands-on experience or detailed insights into specific AI algorithms, techniques relevant to 5G protocols across its communication systems.
On the 4th day of the workshop, the resource person demonstrates the basic understanding of the machine learning optimization techniques and their implementation to solve the real-life engineering problems including 5G communication. Optimization techniques play a crucial role in the advancement and efficient operation of 5G communication systems. As 5G networks support diverse services with varying requirements, such as high data rates, low latency, and massive connectivity, optimization becomes essential to efficiently use resources effectively, manage interference, and enhance energy consumption. With the deployment of complex technologies like massive MIMO, beamforming, and network slicing, optimization ensures optimal performance and quality of service for more while maximizing network capacity and coverage.
In case 5G research, our second resource person discussed and explained the basic rules for massive MIMO on the 5th day of the workshop. He showed how massive MIMO significantly enhances spectral efficiency and user capacity, while also improving signal reliability and coverage. This technology holds promise for future wireless networks, particularly in 5G and beyond, where it can address the ever-increasing demand for high data rates and seamless connectivity in diverse urban environments.
On the 6th day of the workshop, resource person made an impressive discussion and implementation of IRS communication. IRS (Intelligent Reflecting Surface) based communication is a revolutionary technology poised to revolutionize wireless communication systems, particularly in the context of 5G and beyond. Unlike traditional wireless communication systems where signals propagate directly from transmitter to receiver, IRS employs a multitude of passive reflecting elements to manipulate signal propagation. These elements, typically composed of metamaterials or microfluidic materials, can be controlled intelligently to adjust signal phase and amplitude, enabling precise beamforming, interference mitigation, and coverage enhancement. Resource person discussed how IRS communication systems can achieve significant



The AICTE ATAL FDP on “5G and Beyond and Communication: Algorithms and Implementation” held at NL Lab Research Park from March 4th to 8th 2024. A total of 45 participants actively registered and participated in the event, contributing to the success and enriching discussions throughout the program.

“POPPER”



Popper – Fun Challenge Event

Round 1: Ping Pong Catch

In this round, participants show their agility and hand-eye coordination by catching ping pong balls thrown at different speeds and directions. The goal is to catch as many balls as possible within a given time. This activity tests quick reflexes, focus, and the ability to react quickly under pressure.

Round 2: Tongue Twister

The Tongue Twister round tests participants' speaking skills and confidence. Participants must clearly and quickly pronounce difficult tongue-twisting phrases. The challenge is to maintain clarity and accuracy despite the complex arrangement of sounds. This round improves pronunciation, concentration, and mental sharpness while also entertaining the audience.

Round 3: Balloon Bounce

In Balloon Bounce, participants must keep a balloon in the air using only their hands without letting it touch the ground. The balloon's unpredictable movement makes the task challenging and exciting. Participants need to stay alert, focused, and react quickly to keep the balloon moving.

Round 4: Movement Dice

The final round introduces both luck and strategy. Participants roll a dice to determine how many steps they can move on a marked path or grid. They must make smart decisions to move forward while avoiding obstacles. This round encourages critical thinking, planning, and calm decision-making.

Summary

Popper is more than just a fun event. It helps participants develop important skills such as focus, quick thinking, adaptability, and resilience. Through these exciting rounds, participants not only compete with others but also discover their own strengths and abilities. The experience brings both enjoyment and personal growth, making Popper a memorable and rewarding event for everyone involved.



Popper is an engaging non-technical event specially crafted for the students of the 2nd, 3rd, and 4th years of the Electronics and Communication Engineering (ECE) department. Scheduled for the 27th of January 2024.

Events Organized (2023-24)

“DIGITAL TWIN ACCELERATION IN ENERGY AND UTILITIES”

Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
Chennai

Anna University
Chennai

IEEE ComSoc

School of Electrical & Communication
Department of Electronics and Communication Engineering

Cordially invite you for the

30 hours Value Added Course

“Digital Twin Acceleration in Energy and Utilities”

VTU@DRAFT

08:00 am - 06:00 pm

1522

21st & 24th February 2024

RESOURCE PERSON
Dr. V. Jayalakshmi
Professor, Department of Electronics and Communication Engineering, Anna University, Chennai - 25

In the Presence of:
Col. Prof. Vel. Dr. R. Rangaraji
Founder President & Chancelor
Dr. Sagunthala Rangaraji
Foundress President
Prof. S. Sathiyamoorthy
Vice-Chancellor

COORDINATORS
Dr. S. Sathiyamoorthy, Associate Professor - ECE Dept.
Dr. S. Sathiyamoorthy, Associate Professor - ECE Dept.

Contact:
9500 212 7000
www.veltech.edu.in
New-43, Avadi - Vel Tech Road, Vel Nagar Avadi, Chennai - 600 062

30 hours Value Added Course

“Digital Twin Acceleration in Energy and Utilities”

21.02.2024 to 24.02.2024

Time : 8.00 am to 6.00pm

About the course

Digital twin basically means a replicated model of any object or product in digital form. A digital twin has many advantages as it remains connected with the original object or product it is replicating and receives real-time data. Therefore, the obstacles and issues that could be encountered in a product or object can be known before their actual happening which helps to prevent errors and major losses which otherwise might have been incurred. The various capabilities of digital twin technology make it a powerful tool that can be used to effectively boost various sectors of the healthcare, automotive, and construction industries, among others. Therefore, it is critical that a better understanding of digital twin technology is required to facilitate growth and to have it implemented in the various sectors so that transformation can be ushered in. Therefore, this course planned to be a useful resource for those who want to become well acquainted with digital twin technology.

The course begins by introducing the concept of digital twins and sets a path to develop a digital twin strategy to positively influence business outcomes in your organization. It will provide understanding, how digital twins relate to physical assets, processes, and technology and learn about the prerequisite conditions for the right platform, scale, and use case of digital twins. Then this course guide to get hands-on with Microsoft's Azure Digital Twins platform for digital twin development and deployment. By the end of this course, the participant will have developed the skills to build and deploy digital twin prototypes, or minimum viable twin, to demonstrate, assess, and monitor asset at specific stages in the asset life cycle.



The 30 Hours Value Added Course on “Digital Twin Acceleration in Energy and Utilities” was organized by the Department of Electronics and Communication Engineering at Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai, 06 June 2024 .

Events Organized (2023-24)

“Blaze”

Blaze - Igniting the Flames of Resilience and Unity

Round 1: Marble Count

Teams estimate the number of marbles in a transparent container within a limited time. This round tests mathematical thinking, teamwork, and communication.

Round 2: Bingo

Participants play the classic Bingo game by marking numbers on their grid as they are called. The goal is to complete the required pattern first, encouraging attentiveness and quick thinking.

Round 3: Two Truths One Lie

Team members share two true statements and one false statement about themselves while their partner guesses the lie. This round strengthens communication and team bonding.

Round 4: Dice Tower

Teams build a stable tower using dice within a limited time. This round promotes creativity, problem-solving, and teamwork.

Conclusion

Blaze creates a fun and engaging environment where participants develop teamwork, creativity, and communication skills while enjoying moments of joy, friendship, and healthy competition.



Blaze emerges as a dynamic non-technical event, meticulously designed for the 2nd, 3rd, and 4th-year students of the Electronics and Communication Engineering (ECE) department. Scheduled for the 10th of February 2024, Blaze ignites the spirit of camaraderie and personal growth through four captivating rounds, tailored to cultivate confidence and alleviate stress among participants.

Events Organized (2023-24)

“Navigating Digital Frontier – Transforming Technologies in the 21 Century”



Vel Tech
Ranganathan Dr. Sagarajulu
Vellore Institute of Technology
Vellore - 690015

**School of Electrical & Communication
Department of Electronics and Communication
Engineering
(Communication Domain)**

In association with
IEEE Student Branch, Vel Tech
IEEE Communications Society Student Branch
Chapter, Vel Tech

IEEE ComSoc
IEEE Communications Society

Organizes
One week Faculty Development Programme
On
“Navigating Digital Frontier –
Transforming Technologies in the
21st Century”
12th - 16th February, 2024

www.veltech.edu.in No.42, Avadi - Vel Tech Road,
Vel. Near. Avadi.



IEEE ComSoc **Vel Tech** **A++** **CATEGORY 1**

**School of Electrical and Communication
Department of Electronics and Communication Engineering
(Communication Domain)
In association with
IEEE Student Branch, Vel Tech
IEEE Communications Society Student Branch Chapter, Vel Tech
Organizes**

One week Faculty Development Programme
On
“Navigating Digital Frontier – Transforming Technologies in the 21st Century”
12th - 16th February, 2024

ABOUT THE EVENT

The Department of ECE in association with IEEE Student Branch and IEEE Communications Society Student Branch Chapter of Vel Tech organized **One Week Faculty Development Programme** on “Navigating Digital Frontier – Transforming Technologies in the 21st Century” from 12.02.2024 – 16.02.2024. The event commenced with an invocation and the lighting of the lamp. Dr. A. Selvaraj Mich Priyadarshan, the Head of the Department of ECE, welcome the attendees with his insightful words. Dr T Kavitha, Professor, ECE Department, shared information about the FDP. Dr. R. S. Valarmathi, the Dean SoEC, honored the Chief Guest. Mr.Saral David, Digital Technology Consultant, Ex-Regional Director, IoT, AT&T, Chennai with a Memento and gave the Felicitation Address. Dr Benish Jackson, Professor, ECE Department, Vel Tech introduced the Chief Guest. Mr.Saral David gave the Chief Guest Address. He gave the insights about the 5G technology. Finally Vote of Thanks was given by Dr C Karanraj Pappu, Associate Professor, ECE Department.

Day 1: FN Session

Mr.Saral David, was the resource person and he gave the Unleashing the potential and opportunities of 5G technology. He Discussed about the 5G network evolution and what will it bring to the table. 5G Global Update, 5G Global Cases, 5G-India Update and Growth Drivers.

Day 1: AN Session

In the afternoon session he discussed about IoT Catalyst and Key Enabler of Digital Transformation. He gave his insights about the

Factors driving digital transformation initiatives

- Changing customer expectations and market dynamics.
- The need to deliver quality product faster and within the turnaround time.
- The need to enhance the operational efficiency to develop and deliver products/services that meet customer expectations.



The Department of ECE in association with IEEE Student Branch and IEEE Communications Society Student Branch Chapter of Vel Tech organized One Week Faculty Development Programme on “Navigating Digital Frontier – Transforming Technologies in the 21st Century” from (12.02.2024 – 16.02.2024).

Events Organized (2023-24)

“Futuristic Healthcare: Advancements and Applications in Technology”

Vel Tech
Vellore Institute of Technology
Office of International Relations
and
Department of Electronics and Communication Engineering
Jointly organize
One Day Workshop on
Futuristic Healthcare: Advancements and Applications in Technology
09 February 2024
As the presence of
Dr. R. Ranganathan
Faculty President & Chairman
Dr. Sagarthala Ranganathan
Academics President
Prof. S. Subrahman
Vice-Chancellor
Resource Person
Dr. Sagarthala Ranganathan
Director of the Institute of Social & Contemporary Computing
Department of Computer Science
Wuzhou Keel University (Shangri-La Province, China)
Resource Person
Prof. Vladimir Brusic
D. Sci. Eng. China
Professor of Computer Science
University of Nottingham Ningbo, China
No.42, Avadi - Vel Tech Road, Vel Nagar, Avadi, Chennai - 600 062 | www.veltech.edu.in | 0922 212 7669

Vel Tech
Vellore Institute of Technology
Office of International Relations
and
Department of Electronics and Communication Engineering
Jointly Organized
A GUEST LECTURE ON
Futuristic Healthcare: Advancements and Applications in Technology
EVENT REPORT
The Office of International Relations and Department of Electronics and Communication Engineering has organized a Guest Lecture on **Futuristic Healthcare: Advancements and Applications in Technology** on 09/02/2024 at Smart Class Room no.1522.
The Resource Persons for the Guest Lecture are:
• **Dr. Vladimir Brusic**, Professor of Computer Science University of Nottingham Ningbo, China.
• **Dr. Sagarthala Ranganathan**, Director of the Institute of Social & Contemporary Computing Department of Computer Science, Wuzhou Keel University Zhejiang Province, China.



The lecture on "Futuristic Healthcare: Advancements and Applications in Technology" explores the intersection of healthcare and cutting-edge technology among the students. This event delves into innovative solutions and emerging trends shaping the future of medical care. Participants delve into topics such as AI-driven diagnostics, telemedicine, wearable health monitoring devices, and personalized medicine. Through interactive sessions and expert panels, attendees gain insights into how technology is revolutionizing healthcare delivery, improving patient outcomes, and enhancing the overall healthcare experience. The event serves as a platform for collaboration, idea exchange, and exploration of futuristic possibilities in the healthcare industry.

During the forenoon session, **Dr. Sagarthala** introduced a discussion on an application designed to detect the progressive **neurological disorder associated with Parkinson's disease**. The application aims to provide early detection and monitoring capabilities for individuals at risk, potentially revolutionizing the management of Parkinson's disease.

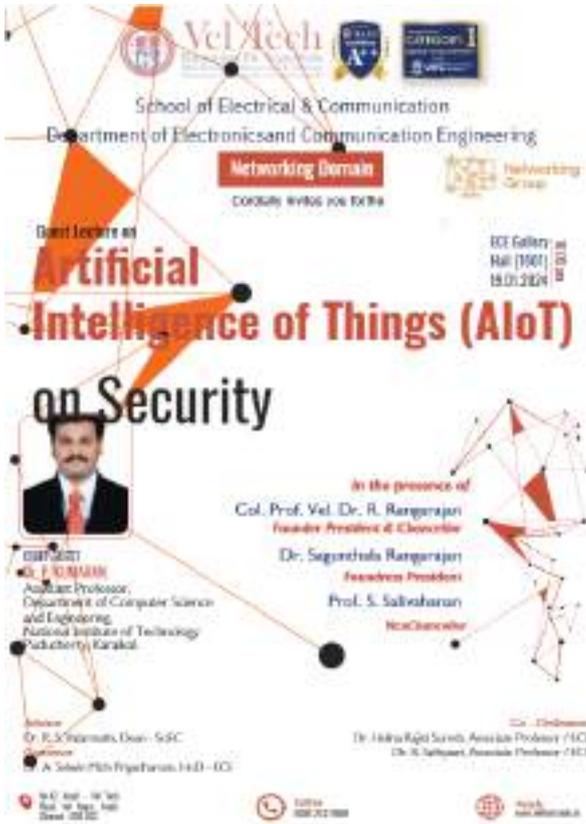
In the post-forenoon session, **Dr. Brusic** delved into the research focus on healthcare system applications, emphasizing its critical role in enhancing healthcare delivery. He highlighted ongoing efforts to **integrate technology into healthcare systems**, optimizing processes and improving patient outcomes. **Dr. Brusic** underscored the importance of continued research in this area to address evolving healthcare challenges effectively.



A guest lecture on “Futuristic Healthcare: Advancements and applications in Technology” was organised by the Office of International Relations and the Department of Electronics and Communication Engineering on 09.02.2024. The session focused on AI, telemedicine, wearable health devices, and personalized medicine to transform modern healthcare. The event provided valuable insights and encouraged knowledge sharing among students and faculty.

Events Organized (2023-24)

“Artificial Intelligence of Things (AIoT) on Security”



The Department of Electronics and Communication, School of Electrical and Communication, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology along with Networking domain, organized a Guest Lecture on **Artificial Intelligence of Things (AIoT) on Security** on **19 January 2024**. The guest lecture was organized with the motive of enhancing the knowledge and skill of the students in the area of Artificial Intelligence, Internet of Things and Security concepts. Totally 50 participants from the departments of ECE students attended the guest lecture. Case studies and examples of AIoT were discussed among students and faculty. To highlight the significance of parent information were also discussed. **Dr. P. Kumaran, Assistant Professor, National Institute of Technology Puducherry, Karaikal** delivered a session.

The guest lecture commenced with invocation. After the formal introduction of its resource person, the session was handled by Dr. P. Kumaran. The session was really useful. Dr. R. Anandhha Saravanan, Associate Professor/Department of ECE concluded with a Vote of Thanks.



The Department of Electronics and Communication, School of Electrical and Communication, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology along with Networking domain, organized a Guest Lecture on Artificial Intelligence of Things (AIoT) on Security on 19 January 2024.

Events Organized (2023-24)

“Project Expo NEXUS 2k24”



School of Electrical & Communication
 Department of Electronics and Communication Engineering
 in association with
 IEEE Madras Section, IEEE CAS, IEEE ProCom & IEEE VTS - Madras Chapters
 IEEE SPS, IEEE ComSoc, IEEE CAS, IEEE IES – Student Branch Chapters, Vel Tech
 Organizes
Project Expo NEXUS 2K24
EVENT REPORT

The "Project Expo NEXUS 2k24" organized by the Department of Electronics and Communication Engineering, School of Electrical & Communication, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology in association with IEEE Madras Section, IEEE CAS, IEEE ProCom & IEEE VTS - Madras Chapters, IEEE SPS, IEEE ComSoc, IEEE CAS, IEEE IES – Student Branch Chapters, Vel Tech, marked a culmination of months of hard work, dedication, and innovation on 20.03.2024. The event aimed to showcase the outcomes of extensive planning and preparation, resulting in a gathering of notable projects and participants. The journey commenced with meticulous planning, including brochure creation, media outreach, registration, and abstract submissions. With overwhelming participation, 130 project abstracts were received, and after careful evaluation, 70 projects were selected for participation. Further procedures, including registration fee payments and final report submissions, were efficiently managed. The event witnessed the presence of esteemed dignitaries including Dr. A. Selwin Mich Priyadharson, Head of the Department of Electronics and Communication Engineering, Dr. R. S. Valarmathi, Dean, School of Electrical and Communication and Smt. A. Latha, Scientist/Engineer/General Manager at the Dept. of SPACE, SDSC-SHAR, ISRO Sriharikota, who graced the occasion as the Chief Guest. Their presence added significant value to the event. Ms. B. Sahaja Chowdary, Secretary, IEEE Signal Processing Society Student Branch Chapter, Vel Tech and Mr. P. Mohith Nag, Student Chair, IEEE Communications Society Student Branch Chapter, Vel Tech shared valuable insights into the importance of IEEE Student Branch Chapters and the essence of innovation and collaboration, aligning with the core values of the event. The highlight of the event was the Project Exhibition, where participants showcased their innovative projects. The projects were evaluated by a panel of four jurors leading to the recognition of outstanding contributions:



The “Project Expo NEXUS 2k24” organised by the Department of Electronics and Communication Engineering, School of Electrical & Communication on 20.03.2024 at ECE Gallery Hall.

Events Organized (2023-24)

“Poster Making & Logo Design Contest”

Vel Tech
Vellore Institute of Technology

Department of Electronics and Communication Engineering
&
Department of Electronics and Communication Engineering

"Poster Making & Logo Design Contest"

Date: 10th February 2024 | Saturday | @ 10:00 am
Venue: ECE Gallery Hall (1601)

In the presence of
Cal. Prof. M. Dr. K. Rajagopal
Vice-Chancellor & Chairman
Dr. Supriya Ramprasad
Faculty President
Prof. S. Subramanian
Vice-Chancellor

Last date of Registration: 09-02-2024

Theme: "Modern India: A Rising Power and Its Future"

Instructions for Participants: Participants should register individually for the contest through the following registration link: <https://onemakeit2024@icet.ac.in/>

- Poster/Logo Design must be unique and should not infringe on any copyrights.
- Two entries – one poster and one logo design are permitted.
- After the event, you are encouraged to share your designs on social media using #VIT/ModernIndiaDesignContest.

Format:

- Acceptable format: JPG or PDF
- Resolution: Minimum 300 dpi
- Size: 24x36 inches (Poster) / 300x300 pixels (Logo)

Advisor: Dr. R. S. Velmurugan, Dean-EC, Vel Tech
Dinvener: Dr. A. Selvaraj Mohan Prasad, IAS-EC, Vel Tech

IETE Co-Organizers:
Dr. J. S. Kumaraswamy, Professor, IAS, Vel Tech
Dr. M. Prathe, Assistant Professor, ECE, Vel Tech
Student Coordinators: Mr. Rohan (2020400111) & Mr. Anshu (2020700011)

POSTER MAKING & LOGO DESIGN CONTEST

The 'Poster Making & Logo Design Contest,' organized by the Department of Electronics and Communication Engineering in collaboration with the IETE Students Forum, was held on the 10th of February 2024 at the ECE Gallery Hall (1601). This event aimed to provide a platform for students to showcase their creativity and design skills. The event commenced promptly at 10:00 am with a warm welcome extended to all participants and attendees. A total of 71 students were registered and 44 students attended the contest. Throughout the day, the venue transformed into a hub of creativity, with participants exchanging ideas, techniques, and inspiration. The event not only provided a platform for artistic expression but also fostered a sense of camaraderie among participants, promoting collaboration and mutual support. As the deadline for submission approached, a sense of accomplishment filled the room as participants proudly presented their finished creations. A panel of esteemed judges of faculty members meticulously evaluated each submission based on creativity, originality, and adherence to the given themes. After careful deliberation, winners were selected across various categories, and prizes were awarded to deserving participants.



"Poster Making & Logo Design Contest," organized by the Department of Electronics and Communication Engineering in collaboration with the IETE Students Forum, was held on the 10th of February 2024 at the ECE Gallery Hall (1601).

Events Organized (2023-24)

“AI and ML Tools for Industrial Robots”



School of Electrical & Communication
Department of Electronics and Communication Engineering
Networking Domain

Cordially invite you for the

Value Added Course on "AI and ML Tools for Industrial Robots"

Date: 21-02-2024 to 24-02-2024 Venue: (4001)
@ 10:30 am

In the presence of
Col. Prof. Vel Dr. R. Nagarajan
Chairman & Founder President - Vel Tech

Dr. Suresh Babu Rajagopalan
Founding President - Vel Tech

Prof. Dr. S. Sathishkumar
Vice-Chancellor - Vel Tech

CHIEF GUEST

Sriram Nagarajan
Founder and CEO of RoboRAM Technologies,
Coimbatore

Convener
Dr. K. S. Valarmathi, Dean SOEC, Vel Tech
Dr. A. Selvaraj Mohan Prasadharan, HOD-ECE, Vel Tech

Co-ordinators
Dr. D David Neel Perikumar, Professor / ECE, Vel Tech
Dr. K.E.Panchanabhanu, Assistant Professor / ECE, Vel Tech



School of Electrical and Communication
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

4 days Value Added Course 21/02/24 to 24/02/24

"AI and ML Tools for Industrial Robots"

The Department of ECE has conducted four days Value Added Course on "AI and ML Tools for Industrial Robots" 21/02/24 to 24/02/24.

The course is one of the hottest areas of interest. Resource person from RoboRAM Technologies Eng. Nagarajan and his trainer visited our premises and they gave in depth knowledge on Robotics, IoT and how AI and ML impacts Robotics.

There were sessions on Sensors by Dr.Karmani Rishi and a session on Industrial Robots by Dr.David Neel Perikumar. The role of AI and Machine Learning in Robotics to make the devices smart was shared by Industry people.

Hands on sessions were given to the participants by the industry people. 62 students from II and III year ECE stream attended the course and the feedbacks proved that they can build their career in Industrial IoT domain.



Department of Electronics and Communication in Association with Networking Group Jointly organised “AI and ML for Industrial Robots” On 21st-24th February 2024

“AAVISHKAR 2K24”



The poster for the AAVISHKAR 2K24 event features the Vel Tech logo at the top left, with the text 'Vel Tech' and 'Rangarajan Dr. Sagunthala Institute of Science and Technology'. It also displays accreditation logos for 'A++' and 'UOC'. The event is organized by the 'School of Electrical & Communication Engineering' and the 'Department of Electronics and Communication Engineering' in association with the 'IETE STUDENTS FORUM (ISF)'. The event title 'AAVISHKAR 2K24' is prominently displayed in red and white, with the dates '28th & 29th February 2024' and location 'ECE Gallery Hall (1601)'. The poster lists technical events: 'PAPER PRESENTATION WEB WIZARD', 'ERROR EPIC (Debugging)', 'MINDMAZE (Quiz)', 'PIXEL PARTY (Photography)', 'ENIGMA (Connections)', and 'SHORT FILM CONTEST'. It mentions the presence of Col. Prof. Vel. Dr. R. Rangarajan (Founder President & Chancellor), Dr. Sagunthala Rangarajam (Foundress President), and Prof. S. Sathivanan (Vice Chancellor). A yellow box indicates 'Registration Fee per student: +120 (online members) - \$1,100; +150 (offline members) - \$1,200'. A red banner at the bottom left says 'ATTRACTIVE CASH PRIZES'. Contact information includes the phone number '1800 232 7669' and the website 'www.veltech.edu.in'.

Two Days Technical Symposium “AAVISHKAR 2K24”

The “AAVISHKAR 2K24” Technical Symposium organized by the Department of Electronics and Communication Engineering in association with the IETE Students Forum, was held on the 28th and 29th February 2024 at the ECE Gallery Hall (1601). The symposium aimed to provide a platform for students to exhibit their skills, exchange knowledge, and foster innovation in the realm of technology and beyond. A total of 159 students registered and actively participated in the symposium, showcasing their talents and skills across various events. The Paper Presentation event saw innovative research papers being presented, with the top papers recognized for their contribution to advancing knowledge in the field. In the Web Wizard coding event, participants demonstrated exceptional coding skills, with the most innovative and efficient solutions earning accolades. The Error Epic (Debugging) challenge tested participants' ability to troubleshoot technical issues, with the fastest and most accurate solutions rewarded. Mindmaze (Quiz) showcased the participants' breadth of knowledge across technology domains, with the top performers acknowledged for their expertise. In the non-technical events, Pixel Party (Photography) celebrated visual storytelling, with prizes awarded for the most compelling narratives captured through the lens. The Short Film Contest recognized creativity and storytelling prowess, with winning films captivating the audience with their originality. Enigma (Connections) challenged participants' critical thinking, with the most adept solvers receiving recognition for their ability to unravel complex puzzles. Winners were selected across various categories, and prizes were awarded to deserving participants. Overall, AAVISHKAR 2K24 was a resounding success, with participants leaving inspired and enriched by the experience.



The “AAVISHKAR 2K24” Technical Symposium organized by the Department of Electronics and Communication Engineering in association with the IETE Students Forum, was held on the 28th and 29th February 2024 at the ECE Gallery Hall (1601).

Events Organized (2023-24)

Motivational Talk on “Emotional Intelligence”

Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
School of Electrical & Communication Engineering
Department of Electronics and Communication Engineering
&
Students' Council
cordially invite you for the
Motivational Talk on
“Emotional Intelligence”
30th
3.00 PM to
4.00 PM
ECE Gallery Hall (308)
RESOURCE PERSON
Ms.M. Kanmani Thivya Jas,
Founder and Propriete of Arise,
Shine Counselling Services,
Chennai.
In the presence of
Col. Prof. Vel. Dr. R. Rangarajan
Founder President & Chancellor
Dr. Sagunthala Rangarajan
Foundress President
Vice Chancellor
Prof. S. Saravanan
Committee
Dr. K. S. Velamuri,
Dean - ECE
Dr. A. Srinivasa Moh. Priyadarshini,
Head - ECE
Students' Council Coordinator
Dr. S. Srinivasan,
Professor - ECE
Programme Coordinator
Dr. K. Saravathi Kumar,
Assistant Professor - ECE
Call No: 044 212 7609
Website: www.veltech.edu.in
No. 45, Avadi, Vel Tech Road,
Vel Tech, Avadi, Chennai - 600 062



Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
School of Electrical and Communication Engineering
&
Students' Council

Emotional intelligence plays a critical role in a student's holistic development, fostering skills that impact their academic performance, relationships, and future success. It equips them with the ability to manage their emotions effectively, navigate challenging situations and come on top with flying colours. Emotional intelligence encompasses a range of skills, including self-awareness, self-regulation, empathy, and social skills. It involves recognizing and understanding emotions, both in oneself and in others, and using that awareness to navigate various situations. In today's rapidly changing world, emotional intelligence holds immense significance in education. Students who possess high emotional intelligence are better equipped to handle the challenges of school and life. They not only excel academically but also thrive socially and emotionally.

Emotional intelligence is an invaluable tool for students, shaping their personal growth, relationships, and academic success. By developing skills such as self-awareness, empathy, and effective communication, students are better prepared to navigate life's challenges and contribute positively to society.



Department of Electronics and Communication Engineering Students' Council and jointly organize Motivational Talk on “Emotional Intelligence on 30.03.2024.

Club Activities Banners

ACADEMIC YEAR 2023-24

AICTE Training and Learning (ATAL) Academy Sponsored Programme
Advanced level Faculty Development Programme
On "Industry 5.0 for Healthcare 5.0"

DEPUTY CHIEF GUEST
 Dr. Anand Krishnan Iyer, Principal Consultant, ICC Global Support Center Pvt. Ltd., Chennai

DEPUTY CHIEF GUEST & KEYNOTE SPEAKER
 Dr. Madhavan Subramanian, Head, Healthcare Technology Innovation Center, Indian Institute of Technology Madras

GUEST OF HONOUR
 Prof. Dr. R. Rangarajan, Founder President, Foundress President, College of Engineering, Govt. of Tamil Nadu, Tamil Nadu, India

In the presence of
 Col. Prof. Vel. Dr. R. Rangarajan, Founder President & Chancellor
 Dr. Sagunthala Rangarajan, Foundress President
 Prof. S. Salivahanan, Vice Chancellor

Organized By
 School of Electrical & Communication
 Department of Electronics and Communication Engineering
 20.11.23 to 25.11.23 (Offline)

ECE Gallery Hall (1650)
 No. 42, Avadi - Vel Tech Road, Vel Nagar, Avadi, Chennai - 610 062 | www.veltech.edu.in | 044-2422766

SCHOOL OF ELECTRICAL AND COMMUNICATION
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
Organizes
AICTE Training and Learning (ATAL) Academy Sponsored Faculty Development Programme
on "Metaverse and Underlying Technologies"

DATE
 04th - 09th December 2023

VENUE
 ECE Gallery Hall (1650)

DEPUTY CHIEF GUEST & KEYNOTE SPEAKER
Dr. M. Manivannan
 Professor, Touch Lab, Experiential Technology Innovation Center (XTIC), Department of Applied Mechanics and Biomedical Engineering, Indian Institute of Technology Madras, Chennai.

GUEST OF HONOUR
Shri. Anand Krishnan Iyer
 Principal Consultant, ICC Global Support Center Pvt. Ltd., Chennai.

GUEST OF HONOUR
Shri. Raghavendra G
 Principal Solutions Architect VRJAR(Haptics), Indian Institute of Technology Madras, Chennai.

In the presence of
 Col. Prof. Vel. Dr. R. Rangarajan, Founder President & Chancellor
 Dr. Sagunthala Rangarajan, Foundress President
 Prof. S. Salivahanan, Vice Chancellor

SCHOOL OF ELECTRICAL AND COMMUNICATION
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
 cordially invites you for the inauguration of
AICTE Training and Learning (ATAL) Academy Sponsored Faculty Development Programme
on "Semiconductor Device Design from RTL to GDS II"

DATE
 16th - 19th Dec. 2023

VENUE
 ECE Gallery Hall

DEPUTY CHIEF GUEST & KEYNOTE SPEAKER
Dr. Parvathidevi Sivasubramanian
 Professor, Technological and Materials Engineering, Electronic Materials and Thin Films Lab, Indian Institute of Technology Madras, Chennai.

DEPUTY CHIEF GUEST & KEYNOTE SPEAKER
Mr. Ganesh Prabhu
 Principal Engineer, M's XIP Semiconductors, Bangalore.

In the presence of
 Col. Prof. Vel. Dr. R. Rangarajan, Founder President & Chancellor
 Dr. Sagunthala Rangarajan, Foundress President
 Prof. S. Salivahanan, Vice Chancellor

Vel Tech A 12 2603

Club Activities Banners

ACADEMIC YEAR 2023-24

ACE Club:

Vel Tech
 Vellore Institute of Technology
 Department of Electronics and Communication Engineering
 In association with
 Association of Communication Engineers
 Jointly hosting the following events

Event -1 Hidden Art
 Round 1 (01-09-23)
 • Paper nap
 • Precision
 Round 2 (05-09-23)
 • Columbus Puzzle
 Finish (15-09-23)
 • Brauldis Puzzle
 Registration link:
<https://forms.gle/4gFHipTgdlDvQd3d>

Event -2 Puzzle and Treasure
 Round 1 (22-09-23)
 • Treasure
 • Puzzle with words
 Round 2 (29-09-23)
 • Bottle Flip
 • Ludo
 Finish (06-10-23)
 • Treasure Hunt
 Registration link:
<https://forms.gle/3GDPnDnECEHWard>

Short Film Submission
 date: (14-10-23)

Grab the opportunity and win exciting prizes

For any queries please contact Mrs. Diana Enakshi (secretary) +919890142023 or Mr. Neel Anand (treasurer) +919871550081

Vel Tech
 Vellore Institute of Technology
 Department of Electronics and Communication Engineering
 In association with
 Association of Communication Engineers
 Jointly hosting the following event

Short Film Submission
 date: (14-10-23)

NOTE: SUBTITLES MUST BE IN ENGLISH
 REGISTRATION DEADLINE: 11.10.2023

For any queries please contact Mrs. Diana Enakshi (secretary) +919890142023 or Mr. Neel Anand (treasurer) +919871550081

Vel Tech
 Vellore Institute of Technology
 Department of Electronics and Communication Engineering
 In association with
 Association of Communication Engineers
 Jointly hosting the following event

BLAZE

Marble Count

Bingo

Two Truths & One Lie

Dice Tower

It's a group event with maximum of 3 members per team
30th Feb, 2024
 Venue: ECE Gallery hall

For any queries please contact Mrs. Diana Enakshi (secretary) +919890142023 and office location of ACE club

ACE ADMIN TEAM

Club Activities Banners

ACADEMIC YEAR 2023-24

Robotics Club



EWB



IEEE Event Banners

ACADEMIC YEAR 2023-24

IEEE Societies



Vel Tech
Rangarajan Dr. Sagunthala
School of Electrical and Communication
IEEE CAS SOCIETY
IEEE Control Systems Society
IEEE PRO/COMM
Professional Communication Society

IEEE PCS Society - Madras Chapter
IEEE CAS Society - Madras Chapter
IEEE Control System Society - Madras Chapter

Cordially invites you for a presentation on

'Road Map For Academic And Sponsored Research'

30th December 2023 at 11:00 am at M.G. Auditorium

Dr. T. Thyagarajan
Vice Professor & Dean, PST Campus & University, Chennai

In the presence of
Col. Prof. Ve. Dr. R. Rangarajan
Founder President & Chancellor
Dr. Sagunthala Rangarajan
Foundress President
Prof. S. Salivahan
Vice Chancellor

Dr. P. Sakthivel
Chairman, IEEE CAS, Madras Chapter

Dr. N. S. Bhuvaneshwari
Chairman, IEEE CSS, Madras Chapter

Prof. Dr. E. Kannan
Chairman, IEEE PCS, Madras Chapter

Tollfree: 1800 212 7469
Website: www.veltech.edu.in
No. 02, Acad. Vel Tech, Morai, Vel Rangarajan, Chennai - 600 002



Event Banners

ACADEMIC YEAR 2023-24

IEEE Societies



Major Project (2023 – 24)



**Communication
Domain**



**Embedded
Domain**



**Networking
Domain**



**Signal processing
Domain**



**VLSI
Domain**

Top Projects:

Students Name : S.Praharsha Karthikeya, P.Lokesh, E.Venkata Narendra

Project Title : Design and Analysis of secured IOT device using symmetric key cryptographic techniques.

Students Name : D.Durga Rajendra, V.Krishnakanth, N.Mohitha

Project Title : Automatic sewage cleaner using arduino.

Students Name : Sugumar.T, Vignasvar, Sachin Kumar

Project Title : Design and Development of Robotic Arm for PCB Board manufacturing and Testing.

Students Name : G.Pranavv Kumar Reddy, CH.Priya Reddy, T.Ramya

Project Title : IoT based smart crop field monitoring and automation irrigation system.

Students Name : Murali Sai Kumar M, Subhash Chandra Bose Reddy K, Lakshmi Prasanna N

Project Title : An X - Band Metamaterial Inspired High Gain Printed Antenna for Ground Based Applications.

Students Name : Yaswanth Chowdary M, Prem Sai K, Vinosh R

Project Title : Development of Flexible Antenna Filaments for Missile Mounted Applications.

Students Name : Nanda Kishore Reddy, Madhava Reddy M, Venkata Sai Prasad

Project Title : Spectrum Management for Low Earth Orbit Communication Satellite System.

Students Name : K. Manjunatha Reddy, Mavillapalli Eshwar, D. Sai Siva Ganesh

Project Title : Synergizing Machine Learning and Blockchain for Enhanced Cybersecurity in Connected Vehicles.



Minor Project (2023 – 24)



**Communication
Domain**



**Embedded
Domain**



**Networking
Domain**



**Signal processing
Domain**



**VLSI
Domain**

Top Projects:

Students Name : B.Vishnuvardhan Reddy, P.Saran Gupta

Project Title : Industrial Shop Floor Activity Sequence Monitoring Using Iot Industry 4.0 Hardware.

Students Name : A. Divijesh Reddy, R. Rohith, G. Nagendra babu

Project Title : A secure communication protocol for Industrial Control Systems to protect critical infrastructure from cyber threats.

Students Name : J. Manindra, J. Eswara Venkat Sai, N. Yashwanth Sai

Project Title : Intelligent Intrusion Detection System using Machine Learning

Students Name : G.Pranay Chowdary, B.Manjunath Reddy, B.Manjunath Reddy

Project Title : Optimization Of Optical Fiber Faults Diagnosing Based on Quantum Machine Learning.

Students Name : Yadamakandi Ashok Reddy, Gowtham Reddy Gangansani, G.Yaswanth Kumar

Project Title : Localization and detection of cardiac structural abnormalities in ultrasound images.

Students Name : P Anji Reddy, N Manideep, P Sai Mokshitha

Project Title : Brain Tumor Classification Using Pretrained Deep Learning Models.



Industry Major Project



Top Projects:

Students Name : M.Manoj Kumar, Y Jaswanth, G Sravan Kumar Reddy

Project Title : Design an Auto encoder based on DNN for MIMO systems.

Students Name : D.Badrinath, T.Taraka Naga Sri Harsha, U.Vemasundar Reddy

Project Title : Machine learning for Beam alignment in millimetre wave massive MIMO.

Students Name : A.Naveena, K.Siva Tejaswini, M.Sai Laxman

Project Title : IOT-powered Energy Management System for industries.1

Students Name : P.Purushotham, Shaik Aman

Project Title : Position and Pressure control of the nozzles of UAV in Agricultural Spraying Applications.

Students Name : CH.Gopi

Project Title : Assessing the cytotoxicity of PM2.5 generated by using detergent.

Students Name : G Jai Sudheer Kumar Goud, Cheka Jagadeep, M.Arun

Project Title : Low area based fir filter for noise reduction in ecg signal.

Students Name : R Sanjay Manohar, Shaik Shameer

Project Title : Visual safety monitoring: detecting deviations in industrial environments.

Students Name : M.Karthik Raju, M Sathish Kumar Reddy, A Srikanth

Project Title : Development of novel carbon based composite for flexible electronic structures.

Students Name : Ch. Jeshwanth, I Venkata Rishi Kiran, J Aravind

Project Title : A Miniaturized UWB patch antenna with filtering characteristics.

Students Name : M.Pavankumar, M.Sai Varun, P.Charan

Project Title : Agricultural supply chain management using block chain technology.



Industry Major Project

Top Projects:

Students Name : Sai Manoj, Dharani

Project Title : Smart Textile Waste Collection System – Dynamic Route Optimization With IoT.

Students Name : Manikanta Kumar, Naveen Kumar, Gopinadh Reddy

Project Title : A Novel Algorithm To Improve Throughput And Reduce Broadcast Storm In MANETS.

ABROAD PROJECTS

Students Name : Prativa Oli

Project Title : Development of an Automated Data Collection & Analysis Program for Time Transfer studies

Name of the University & Country: A*STAR NMC, Cleantech loop & Singapore.

Students Name : Syed Asadh

Project Title : Intrusion Detection using Machine Learning.

Name of the University & Country: National Formosa University & Taiwan.



ONE CREDIT COURSES



S.NO	Course Code	Course Name	L-T-P-C	Number of Credits	Number of Hours	Regulation	Regulation	Professor Details
1.	10215EC101	Security and Privacy in 6G Networks	1-0-0-1	1	15	R21	Summer 23- 24	Prof. Dr.Naveen Chilamkuri, La Trobe University, Australia
2.	10215EC107	Fundamentals of MEMS	1-0-0-1	1	15	R21	Summer 23- 25	Professor L. J. Yang of the Department of Mechanical Engineering, Tamkang University,Taiwan
3.	10215EC102	Ethical Hacking and Pen Testing	1-0-0-1	1	15	R21	Summer23- 26	Prof. Dr.Naveen Chilamkuri, La Trobe University, Australia
4.	10215EC110	Geospatial Modeling in Precision Agriculture and Pant Science	1-0-0-1	1	15	R21	Summer 23-27	Dr.RajuAedla,Research Scientist, Kumamoto University, Japan
5.	10215EC111	UAV/Drone Technology and its Applications	1-0-0-1	1	15	R21	Summer 23-28	Dr.RajuAedla,Research Scientist, Kumamoto University, Japan
6.	10215EC112	Remote Sensing and Digital Image Processing	1-0-0-1	1	15	R21	Summer23-29	Dr.RajuAedla,Research Scientist, Kumamoto University, Japan
7.	10215EC914	Next Generation of Wired and Wireless Networks	1-0-0-1	1	15	R21	Winter 23-24	Prof. Pascal Lorenz , University of Haute-Alsace, France.
8.	10215EC915	Fieldbus Architectures	1-0-0-1	1	15	R21	Winter 23-24	Prof. Pascal Lorenz , University of Haute-Alsace, France.
9.	10215EC916	Machine Learning	2-0-0-2	2	30	R21	Winter 23-24	Prof.Dr.Afizan Bin Azman, Taylor's University, Malaysia
10.	10215EC906	Data Analytics	0-0-2-1	1	30	R21	Winter 23-24	Prof. Dr.Kasturi Dewi Varathan, University of Malaya, Malaysia
11.	10215EC921	Innovation through Design Thinking	1-0-0-1	1	15	R21	Winter 23-24	Prof.Dr.Chockalingam AravindVaithilingam School of Engineering, Faculty Technology,of Innovation & Taylor's University, Malaysia
12.	10215EC917	Digital Forensics and Incident Response	1-0-0-1	1	15	R21	Winter 23-24	Prof. Sunderesan Perumal, Assoc.Prof. DS54 / Director of University, Entrepreneurship University Sains Islam Malaysia.
13.	10215EC918	Cybersecurity Threat Handling and Incident Response	1-0-0-1	1	15	R21	Winter 23-24	Prof. Sunderesan Perumal, Assoc.Prof. DS54 / Director of University, Entrepreneurship University Sains Islam Malaysia.



ONE CREDIT COURSES



Digital Forensics - 05.03.2024 to 07.03.2024

Expert Details

Mr. Praveen Doss

Cyber Security Instructor

M/S Cyber security Infotech Private Ltd.,
Chennai.



Virtual Reality for Gaming Industry - 11.03.2024 to 13.03.2024

Expert Details Mr.E. Vinoth, VR Developer,M/STechshiksha,
Bangalore



Cybersecurity Threat Handling & Incident Response - 02.04.2024 to 04.04.2024

Expert Details Prof. Ts Dr. Sundaresan Perumal, Director Centre for Entrepreneurship
Univeriti Sains Islam Malaysia, Malaysia



ONE CREDIT COURSES



Machine Learning - 04.03.2024 to 11.03.2024

Expert Details Dr. Prof. Dr. Afizan Bin Azman
Taylor's University, Malaysia



Digital Forensics and Incident Response - 22.03.2024 to 01.04.2024

Expert Details Prof. Ts Dr. Sundaresan Perumal, Director Centre for Entrepreneurship
Univeriti Sains Islam Malaysia, Malaysia



Innovation through Design Thinking - 11.03.2024 to 13.03.2024

Expert Details Dr. Chockalingam Aravind Vaithilingam
Taylor's University, Malaysia



ONE CREDIT COURSES



Data Analytics - 22.02.2024

Expert Details Dr. Kasturi Dewi Varathan, Associate Professor
University of Malaya, Malaysia



Fieldbus Architecture - 29.01.2024 to 03.02.2024

Expert Details Prof. Dr. Pascal Lorenz
University of Haute Alsace, France



Professional Body



The students are encouraged to undertake various academic and non-academic activities through Professional Bodies and different clubs associated with the department and the Institute. In the department level we have the actively functioning “IEEE Signal Processing Society”, “IEEE Circuits and Systems Society”, “IEEE communication society” and “IEEE industrial society”.

The department of Electronics and Communication Engineering successfully inaugurated the IEEE Student Branch Chapter of the IEEE Signal Processing Society on 13.05.2022. The department of Electronics and Communication Engineering (ECE) organized the inauguration of the IEEE Circuits and Systems Student Branch Chapter on 25.04.2023. IEEE Membership offers access to technical innovation, up-to-date information, networking opportunities, and member benefits. IEEE members enjoy reduced costs on many products and services like IEEE books, funding for projects, journals, conferences, society memberships, and continuing education courses. IEEE Societies provide members with opportunities to connect with experts locally and abroad while staying up to date on technology and trends. The student members get a chance to develop their interpersonal skills, leadership skills and teamwork skills by making us involved in various event organizations and management.

- IEEE Student Membership Cost: 27 US Dollars
- Membership cost for students: 1 US Dollar

IEEE SIGNAL PROCESSING SOCIETY

Faculty Coordinators



Dr. Rahul S G
Assistant Professor



Ms. Subha K J
Assistant Professor

Professional Body



Office Bearers:



Student Chair
T. Sri Sai Lakshmi Revathi
(VTU21287)
2021-2025 Batch



Vice Chair
K. Harshitha
(VTU20403)
2021-2025 Batch



Secretary
B. Sahaja Chowdary
(VTU20673)
2021-2025 Batch



Joint Secretary
Shaik Zaheer
(VTU21705) 2022-2026
Batch



Treasurer
N. Lakshmi Prasanna
(VTU21310)
2021-2025 Batch



Joint Treasurer
M. Charan
(VTU23416)
2022-2026



Joint Web Master
Bora Gowtham
(VTU20807)
2021-2025 Batch



Web Master
M. Ram Charan
(VTU20795)
2021-2025 Batch



Joint Web Master
V. Ganeswar
(VTU21711)
2022-2026 Batch



Event Coordinator
G. Venkata Seshagiri
(VTU20841)
2021-2025 Batch



Event Coordinator
Sk. Khaleel
(VTU20731)
2021-2025 Batch



Event Coordinator
K. Pavan Teja
(VTU21844)
2022-2026 Batch



Event Coordinator
M. Indra Sena Reddy
(VTU20798)
2021-2025 Batch





IEEE CIRCUITS AND SYSTEMS SOCIETY

Faculty Coordinator



Dr. G. Sasikala
Professor



Secretary
Dr. P. Kalpana Devi
Professor
IEEE Circuits and Systems Society Madras Chapter

Office Bearers:



Student Chair
P. Dillep Kumar
(VTU19149)
2021-2025 Batch



Vice Chair
Valli Sri Subramanheswari
(VTU23626)
2022-2026 Batch



Secretary
P. Logeshwari
(VTU20673)
2021-2025 Batch



Joint Secretary
Venkata Sai Sudeep Reddy
(VTU23648)
2022-2026 Batch

Professional Bodies



Treasurer
A. Likitha
(VTU19382)
2021-2025 Batch



Joint Treasurer
P. Manoj Kumar Reddy
(VTU19107)
2021-2025 Batch



Web Master
Yadiki Kuswanth Reddy
(VTU19097)
2021-2025 Batch



Joint Web Master
Venkat Sai
(VTU23741)
2022-2026 Batch



Joint Web Master
Rakesh Reddy
(VTU23650)
2022-2026 Batch



Event Coordinator
A. Vishnu Sai
(VTU24177)
2022-2026 Batch



Event Coordinator
Sujith Paul
(VTU21822) 2022-2026
Batch



Event Coordinator
R. Murugesh
(VTU23811)
2022-2026 Batch



Professional Body



IEEE INDUSTRIAL ELECTRONICS



Faculty Advisor
Dr. R. Rajkumar
Associate Professor

Office Bearers:



Student Chair
Y. Ranjith Kumar
(VTU23961)
2021-2025 Batch



Vice Chair
M. Siva Chandra Lekha
(VTU23960)
2021-2025 Batch



Secretary
E. Rishyendra Lakshmana Sai
(VTU19388)
2021-2025 Batch



Joint Secretary
V. Rushi Kesava Reddy
(VTU22589)
2022-2026 Batch



Treasurer
V. N. K. Aakash Kumar
(VTU19710)
2021-2025 Batch



Event Coordinator
Rohit Kumar
(VTU21129)
2021-2025 Batch



Web Master
K. Poojitha Reddy
(VTU24010)
2021-2025 Batch



Web Master
Jinde Shreya
(VTU20249)
2021-2025 Batch

Professional Body

IEEE COMMUNICATION SOCIETY



Faculty Advisor
Dr. C Kanmani Pappa
Associate Professor

Office Bearers



Student Chair
T Mohith Nag
(VTU21000)
2021-2025 Batch



Vice Chair
P Anji Reddy
(VTU20945)
2021-2025 Batch



Secretary
D Pavan Sriram
(VTU0998)
2021-2025 Batch



Joint Secretary
G Srinivasulu
(VTU27016)
2022-2026 Batch



Web Master
M Sri Vaishnavi
(VTU20117)
2021-2025 Batch



Event Coordinator
P Mokshitha
(VTU20938)
2021-2025 Batch



Event Coordinator
V Ram Dheeraj
(VTU20983)
2021 - 2025 Batch



Treasurer
B Simhadhari
(VTU21009)
2021-2025 Batch



Joint Web Master
K Swathi
(VTU23327)
2022 - 2026 BATCH



Joint Web Master G
Jeshwanth Reddy
(VTU20761)
2021-2025 Batch



Joint Web Master
P Vinay
(VTU23567)
2022-2026 Batch



Web Master
P Naveen
(VTU20300)
2021-2025 Batch



Event Coordinator
H Sarath
(VTU23624)
2022-2026 Batch



Event Coordinator
P Lakshmi Narasimha
(VTU20987)
2021-2025 Batch

Professional Body

Engineers Without Borders - India Vel Tech Student Chapter

The students are encouraged to undertake various academic and nonacademic activities through Professional Bodies associated with the department and the Institute. We have “Engineers Without Borders (EWB) - India Veltech Student Chapter” at department level, builds a better world through engineering projects that empower communities to meet their basic human needs. Our highly skilled volunteers work with communities to find appropriate solutions for their infrastructure needs. The EWB Student Chapter was inaugurated in our department on 12th September, 2020. EWB India is an Evolving Network of Humanitarian Engineers and Other Professionals in India. The vision of EWB Student Chapter is to nurture and motivate students and professionals to undertake real life sustainable social projects and create Global Leaders. The Mission of EWB Student Chapter is to partner with corporate & social organizations, involve students and professionals, and offer sustainable solutions in the areas of Water, Sanitation, Energy, Health & Education to improve the quality of life for common people. EWB Student Chapter provides members with opportunities to connect with experts locally and abroad while staying up to date on technology and trends. The student members get a chance to develop their interpersonal skills, leadership skills and teamwork skills by making themselves involved in various event organizations and management activities.



Faculty Coordinator

Dr. S. Vijayalakshmi
Assistant Professor

Department Club Activities



Association of Communication Engineers

The Association of Communication Engineers (ACE) club of ECE department was inaugurated in the year 2015. The club organizes periodically non-technical events; social and community outreach programs such as Guild of Service for the professional and psychological development of student engineers and acts as a platform for the students to showcase their literary skills and creativity. It promotes fine arts, art appreciation, and interactive events. It also provides opportunities for the development of management and communication skills. The club focuses on both personal and professional growth of individuals as well on its own growth.



Faculty Coordinator

Dr. V. Diana Earshia
Assistant Professor

Programming Club



The Programming Club in the ECE department empowers the students of ECE, making them competitive in programming skills and contemporary technologies. The club periodically conducts value added courses through which the students become proficient in different programming platforms and complete the programming hackathon at an international level.

Faculty Coordinator

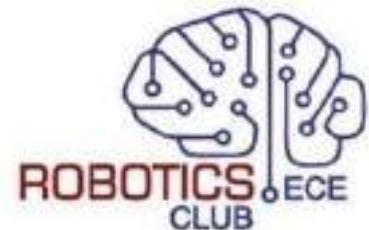
Dr. Dasari Naga Vinod
Assistant Professor



Department Club Activities

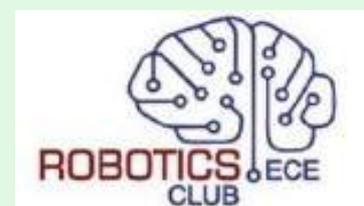
ROBOTICS CLUB

Robotics club at ECE department was inaugurated in the year 2018 and strives to stimulate interest in robotics among undergraduate students. The club offers essential guidance, workshops and tutorials along with tools, equipment, components and workspace by which students become proficient and one able to compete in national and international level robotics contests. Robotics club provides members with opportunities to connect with experts locally and abroad while staying up to date on technology and trends. It conducts competitive events based on Robotic projects. The intention is to provide technical support to interested participants in Robotic competitions.



Faculty Coordinator

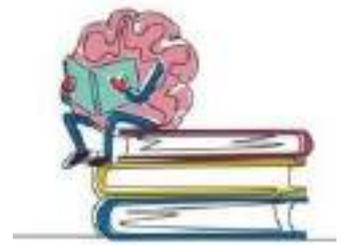
Dr. M. Anandan
Associate Professor



INTERNATIONAL UNIVERSITY INTERNSHIPS

2019-2023 Batch Students- Internship

International University



Syed Asadh

“Intrusion Detection using Machine Learning”
National Formosa University, Taiwan



CH.Gopi

“Assessing the cytotoxicity of PM2.5 generated by using detergent”
Ming Chi University of Technology, Taiwan



G Mukesh Narayana

“Smart Home Automation IOT Hub with Multi-Protocol”
Universiti Sains Islam, Malaysia



Prativa Oli

“Development of an Automated Data Collection & Analysis Program for
Time Transfer Studies”
National Innovation Centre, Nepal



Sarthar Mohaideen

“Enhancing Autonomous Vehicle LiDAR Data by Filtering Adverse Weather
Conditions”
Feng chia University, Taiwan



INDUSTRY PROJECTS

Nelakurthi Rahul Kumar, Gongal Reddy v. Kishore Reddy
“Automated traffic light control system”
Glo Led Pvt Ltd, Hyderabad

Manoj Gangavarapu, Vundela siva reddy, B Veera Siddeswara Reddy
“Energy saving lights”
Stanjo LED Limited, Hyderabad

Dasari Vijaya Lakshmi, Gampala Pranay Kumar, Ch Raviteja Reddy
“Power in industries”
Universe power Pvt Ltd, Bangalore

Eslavath Rajkumar, Divya Vamsi, Rasad
“Glowing Led Street Light Using Solar Panel”
Stanjo LED Limited, Hyderabad

Adla.Chandra Vamshider reddy, P Sasi Kumar, Shaikarcham Siddique
“Data Logging of Vehicle Speed and Rpm (Odometer)”
Voltme Motors Pvt Ltd, Chennai

Shaik Afrin Sultana, Somala Harsha Vardhan Reddy, G.VVK Amrutha Srivalli
“Generator voltage Regulation and rectifier fault identification algorithm”
CVRDE, Chennai

Gongal Reddy V. Kishore Reddy, Kiran Kumar Kotte, M.Mallikarjun
“Design of smart board for operation of home appliances using ESP 32”
Glo Led Pvt Ltd, Hyderabad

Students Name: R.Durga Kanaka Sainadh
Project Title: Billing Website for Retail Business
Company Name: TVS Electronics

Setti Sai Ganesh, S. Naveen kumar, Jasti Srinivas Chandra
“Driver Drowsiness Detection”
Kwality Photonics, Hyderabad

A.Sai kumar, Bonmisetty Mahalakshmi, Matta Purna Venkata Naga Sai Kiran
“Drone and UAV detection for security Applications using Deep Learning”
Kwality Photonics, Hyderabad

Akshaya Sadineni, Gadupudi Sri Ramya
“Design and development of Payload dropping mechanism for remotely Piloted Aircraft”
UCAL Pvt Ltd, Chennai

INDUSTRY PROJECTS

Saikiran Chandana, K Srujan Kumar reddy, V Dhana shekar
“Wireless Data Logging of battery pack”
Voltme Motors Pvt Ltd, Chennai

M.Abinav Joshi
“IP based suveillance CCTV system”
Vizag Steel Plant, Visakhapatnam

Aturi Venkata Srinivas, Sathvika L S
“Sensors & Power Saving”
Universe power Pvt Ltd, Bangalore



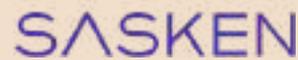
STUDENTS PLACED IN TOP COMPANIES

- 2 STUDENTS PLACED IN GENPACT FOR 8LPA
- 2 STUDENTS PLACED IN KAAR TECHNOLOGIES FOR 6.5LPA
- 1 STUDENT PLACED IN ONEYES INFOTECH FOR 5LPA
- 1 STUDENT PLACED IN TRANSTECHNOLOGIES FOR 6LPA
- 9 STUDENTS PLACED IN L&T TECHNOLOGY FOR 4LPA
- 1 STUDENT PLACED IN MUSIGMA FOR 5 LPA
- 1 STUDENT PLACED IN LUMEN FOR 6LPA
- 3 STUDENTS PLACED IN MPHASIS FOR 4LPA
- 2 STUDENTS PLACED IN ACCENTURE FOR 4.5LPA
- 14 STUDENTS PLACED IN SKILLFORGE FOR 4LPA
- 1 STUDENT PLACED IN TESSOLVE SEMICONDUCTOR FOR 3.6LPA
- 2 STUDENTS PLACED IN SASKEN TECHNOLOGIES FOR 5LPA
- 2 STUDENTS PLACED IN BYJU'S FOR 7LPA
- 2 STUDENTS PLACED IN TRANSCURATORS FOR 6LPA
- 9 STUDENTS PLACED IN TCS NINJA FOR 3.3LPA
- 2 STUDENTS PLACED IN TCS DIGITAL FOR 7LPA
- 5 STUDENTS PLACED IN KALVIUM FOR 5LPA
- 1 STUDENT PLACED IN LOGITECH FOR 3LPA
- 4 STUDENTS PLACED IN FACEPREP FOR 3.6LPA
- 4 STUDENTS PLACED IN KGIS FOR 2.83LPA
- 2 STUDENTS PLACED IN 24/7AI FOR 2.4LPA
- 2 STUDENTS PLACED IN FOXCONN FOR 3LPA
- 34 STUDENTS PLACED IN RUN SERVICE INFOCARE FOR 2.64LPA
- 10 STUDENTS PLACED IN NISSI ENGINEERING FOR 3.60LPA
- 3 STUDENTS PLACED IN GLOBE QUEST FOR 4LPA
- 22 STUDENTS PLACED IN SNIPE ENGINEERING FOR 2.5 LPA
- 6 STUDENTS PLACED IN KODENEST FOR 2.5LPA
- 7 STUDENTS PLACED IN KM MACHINERIES FOR 2.62 LPA
- 4 STUDENTS PLACED IN QSPIDERS FOR 3.5 LPA
- 1 STUDENT PLACED IN S10 HEALTHCARE SOLUTION FOR 3LPA
- 1 STUDENT PLACED IN W3 GLOBAL FOR 3 LPA
- 13 STUDENTS PLACED IN ACADEMOR FOR 4 LPA
- 2 STUDENTS PLACED IN ASCENSION FOR 4.5 LPA
- 5 STUDENTS PLACED IN CAPGEMINI FOR 4.25 LPA
- 3 STUDENTS PLACED IN COGNIZANT FOR 4LPA
- 1 STUDENT PLACED IN SMARTED FOR 3 LPA
- 1 STUDENT PLACED IN EDIGLOBE FOR 4LPA

PLACEMENTS

S.No	STUDENT PLACEMENT DETAILS	COUNT
1	Number of Students admitted	374
2	Number of Eligible Students for Placement	230
3	Number of Students Placed	188*
4	Number of Students Placed in Core Companies	89
5	Number of Students Placed in IT Companies	99
6	Number of Companies Visited	52
7	Minimum Package Offered	2.5 LPA
8	Maximum Package Offered	7 LPA
9	Medium Package Offered	5 LPA

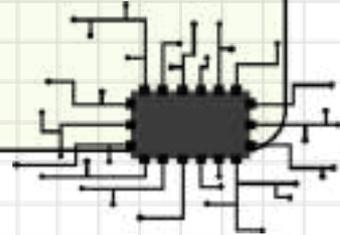
PLACEMENTS



SKILLS IMPARTED THROUGH PROGRAM ELECTIVE

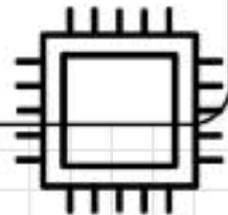
COMMUNICATION DOMAIN

Antenna Design Techniques
EMI/EMC
MIMO Wireless Communication
Software Defined Radio



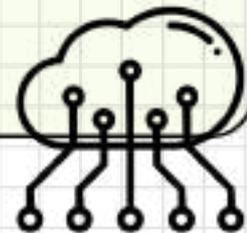
EMBEDDED DOMAIN

ECS and PCB Design
Virtual Instrumentation
Real Time Operating System
Embedded System and Robotics
Embedded C Programming



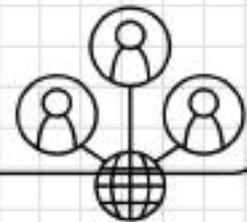
NETWORKING DOMAIN

Internet Of Things
Wireless Adhoc and Sensor Networks
Software-Defined Networking
Cognitive Radio Networks



SIGNAL PROCESSING DOMAIN

Basics of Python Programming
Professional Python Programming
Digital Image Processing
Fundamentals of Machine Learning
Machine Learning



VLSI DOMAIN

Reconfigurable Computing with FPGA
Physical Design of CMOS
Analog VLSI Design





EDITORIAL TEAM

Data Collection

Dr. SATHYASRI B
Associate Professor

Dr. V KOUSHICK
Assistant Professor

Proof Reading

Dr. BEULAH JACKSON
Professor

**Dr.A.SELWIN MICH
PRIYADHARSON**
Professor and Head

Editing & Graphics Design

**K Neeli Madhav Reddy (VTU18321) 8th semester
Vishnuvardhan (VTU21140) 6th semester
S Akash (VTU24420) 1th semester**





Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Est. in 3 of UGC Act, 1956)



Join Our Community



@veltechuniversityofficial



@veltechuniversityofficial



@veltechofficial



@veltechuniversityofficial



@veltechofficial



deansoe@veltech.edu.in
hodece@veltech.edu.in



Tollfree
1800 212 7669



Website
www.veltech.edu.in



**No: 42, Avadi - Vel Tech
Road, Vel Nagar, Avadi,
Chennai - 600 062**

