



ERODE SENGUNTHAR ENGINEERING COLLEGE



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Our Vision

Vision of Erode Sengunthar Engineering College is to become a World Class Technical Institution and Scientific Research Centre for the Benefit of the Society.

Our Mission

- Create Positive difference to Society through Innovative Teaching – Learning Process.
- Impart Value Based Technical Education to the Students from across various Socio Economic backgrounds.
- Build State of art infrastructure for high quality Research and Development capabilities on par with

the finest in the Globe and widen student's horizons beyond Class Room.

- Bring out Competent, Ethically Strong and Quality Professionals.





PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

- **PEO1-Core Competence:** Our Graduate will be Globally Competent Computer Science Professionals who would comprehend, understand, analyse and solve Engineering problems in order to cater to the needs of industry and society
- **PEO2-Breadth:** Our Graduates will interact with their peers in multi- disciplinary environment in industry and society and contribute to the economic growth of the country.
- **PEO3-Research and Innovation:** Our Graduates will have the ability to adapt, contribute and Research, innovate new technologies and systems in the domain of Computer Science and Engineering
- **PEO4-Professional Integrity:** Our Graduates will function in their chosen profession with ethics, social awareness and responsibility

Program Outcomes(PO)

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public

health and safety, and the cultural, societal, and environmental considerations.

4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able



to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management and finance:

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

12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Software Development Model: An ability to design a software project using Software Development Life Cycle process.

PSO2: Advanced Technology Skills: An ability to develop application using Computing and Communication Technologies.

PSO3: Personality Development: Able to inculcate Effective Communication, Team Work, Ethics and Leadership skills in a preparation for a successful career in Industry.

ACHIEVEMENTS STUDENTS

- Selvan C.Shajan , Selvan K.Ruthik , Selvan S.Praveen of IV year Computer Science and Engineering has Participated in EDII HACKATHON (KIOT) organized by Government of Tamil Nadu at Bharathiyar University,

Coimbatore on 03.09.24 to 05.09.24 and won Second Runner up with cash prize of Rs.10,000/-

- Selvan M.Karthikeyan of IV year Computer Science and Engineering has Participated in Micro Cine Mania (ShortFfilm) event at GIZMO GALA organized by Suguna College of Engineering, Coimbatore on 26.10.24 and won First Place with cash prize of Rs.1000/-

- Selvan M.Karthikeyan of IV year Computer Science and Engineering has Participated in Lenz Legends (Photography) event at GIZMO GALA organized by Suguna College of Engineering, Coimbatore on 26.10.24 and won Second Place with cash prize of Rs.800/-

1.ASSOCIATION ACTIVITIES

- Conducted** a Workshop on “Business Analytics using Microsoft Power BI” on **02.09.2024.**

Resource Person: Mr. S. Gokulraj, Technical Lead, GG Technologies, Chennai.

- Hosted** a Guest Lecture on “Revolutionizing Communication through AI” on **06.09.2024.**

Resource Person: Dr. B. Gomathy, Professor, PSG Institute of Technology and Applied Research, Coimbatore.

- Facilitated** a One-Day Seminar on “Vital Life Skills and Their Implications”.

Resource Person: Mr. T. P. Karthik, Social Commerce Entrepreneur & Project



Manager, IT Industry, Kyndryl India Pvt. Ltd., Chennai.

- **Coordinated** a Three-Day National Level Hackathon “Hackfest 2k24” from **25.09.2024** to **27.09.2024**.

Resource Persons: Mr. Ashok Kumar, Founder/Educator/Developer, Praya Labs, Tiruvannamalai, and Dr. S. Hariprasad, Director (R&D), Polenza Tech Solutions, Chennai.

- **Arranged** a Career Guidance Program titled “The Career Launch Pad: Step into Your Future” on **30.09.2024**.

Resource Person: Dr. M. Manjula, Assistant Professor, Dr. N.G.P. Arts and Science College, Coimbatore.

- **Conducted** a Two-Day Workshop on “MERN Stack Web Development” on **04.10.2024** & **05.10.2024**.

Resource Person: Mr. G. Kowsik, Full Stack Architect, Altimetrik Pvt. Ltd., Bangalore.

- **Hosted** an Awareness Program on “ServiceNow Global Certification” on **21.10.2024**.

Resource Persons: Mr. Yuktesh, Director – Academic Relations; Mr. Jai Prakash, Project Head; and Mr. Vijay Vajravel, Regional Manager, SmartBridge, Hyderabad.

- **Conducted** a Seminar on “Exploring the Role of Machine Learning in Data Science” on **21.10.2024**.

- **Resource Person:** Mr. P. Vinayaga Moorthy, CEO & Founder, TechnoVolt Software Pvt. Ltd., Coimbatore.

- **Facilitated** a Hands-On Training Session on “Manual and Automation Testing through Selenium Tool” on **23.10.2024**.

- **Resource Person:** Ms. V. Yuvasree, Quality Analyst, Wipro Technologies Pvt. Ltd., Bangalore.

- **Conducted** a Workshop on “Advanced Ensemble Methods in Machine Learning for Predictive Analysis” on **23.10.2024**.

- **Resource Person:** Dr. S. Vaishnavi, Assistant Professor (Sr. G), PSG Institute of Technology and Applied Research.

- **Arranged** a Workshop on “Let Us Stay Safe in the Cyber World” on **23.10.2024**.

- **Resource Person:** Mr. Karthik Jayaraman, Assistant Manager – Innovation and Technology, New Delhi.

- **Hosted** a SERB Sponsored Two-Day National Seminar on “Embracing Future Trends and Predictions of Quantum Computing and Extended Reality (XR) in Automotive Industry” on **17.10.2024** & **18.10.2024**.

- **Resource Persons:** Dr. Sindhu P. Menon, Professor and Head (AI-ML), REVA University, Karnataka; Dr. B. L. Shilpa,



Associate Professor, ATME College of Engineering, Mysore; and Mr. S. Sridhar & Mr. N. Karthirvel, Trainers, Intrino Robotics & Technology Pvt. Ltd., Chennai.

- **Conducted** a SERB Sponsored Three-Day International Conference on “Advancement in Generative AI, IIoT and Quantum Computing” from **01.10.2024 to 03.10.2024**.
- **Resource Persons:** Dr. M. Rajeshwari, Professor, Karunya Institute of Technology, Coimbatore; Dr. J. Nirmaladevi, Professor, KPR Engineering and Technology, Coimbatore; and Dr. S. Saranya, Assistant Professor, Eswar College of Engineering, Coimbatore.
- **Facilitated** a Five-Day Short Term Training Programme (STTP) on “ICT-49: Cryptography and Network Security” from **16.09.2024 to 20.09.2024**.
- **Resource Person:** Dr. C. Rama Krishna, Professor, Department of CSE, NITTTR, Chandigarh.
- **Coordinated** a Five-Day STTP on “ICT-59: Tools for Research in Cloud, Fog and Edge Computing” from **21.10.2024 to 25.10.2024**.

Resource Person: Dr. Mala Kalra, Professor, Department of CSE, NITTTR, Chandigarh.

Conducted a Workshop on “Building a Career in Cybersecurity: Roles, Certifications and Skillsets” on **14.11.2024**.

Resource Person: Ms. Revathi Gopalan, Senior Soft Skill Development Engineer, Yellowmatics, Coimbatore.

Facilitated a Five-Day STTP on “ICT-70: Open Source Applications in Engineering Education” from **18.11.2024 to 22.11.2024**.

Resource Person: Mr. Amit Doegar, Associate Professor, Department of CSE, NITTTR, Chandigarh.

2.GUEST LECTURES/ LEADERS TALK

- Organized Guest Lecture on “Revolutionizing communication through AI” on 06.09.2024. Resource Person : Dr. B. Gomathy, Professor, PSG Institute of Technology and Applied Research, Avinashi Road, Neelambur, Coimbatore
- Organized leaders talk on 04.10.2024 & 05.10.2024 .Resource Person : Mr.G.Kowsik, Full Stack Architect, Altimetrik, Pvt Ltd., Bangalore.

3. Patent / Patent Submission Status

The Department of Computer Science and Engineering has demonstrated significant research and innovation through multiple patent filings and grants during the academic year 2024–2025. Faculty members have contributed extensively across various domains, including artificial intelligence, machine learning, IoT, healthcare, cybersecurity, and education technology.



- Mr. **M. Sakthivel** filed two patents—“Autism Detection using Pre-trained Models in Machine Learning” (Application No. 202441059195, filed on 05.08.2024, published on 09.08.2024) and “Fake Profile Detection using Machine Learning” (Application No. 202541009234, filed on 04.02.2025, published on 14.02.2025).
- Ms. **R. Punitha Gowri** submitted a patent titled “Early Plant Disease Detection in Agriculture by Integrating IoT, Machine Learning and Deep Learning Techniques” (Application No. 202441073553, filed on 29.09.2024, published on 04.10.2024).
- Mr. **E. Loganathan** filed “Early Detection and Classification of Breast Cancer using Image Processing, IoT and Machine Learning” (Application No. 202421072239, filed on 24.09.2024, published on 01.11.2024).
- Mr. **R. Parthiban** submitted a patent titled “Predictive Analysis of Social Media and Cybercrime Effects on Higher Education Academic Performance using Machine Learning” (Application No. 202441051106, filed on 03.07.2024, published on 12.07.2024).
- Ms. **S. Revathi** filed a patent on “Integration of the Internet of Things and AI for Monitoring Climate, Earthquakes and Air Quality” (Application No. 202411057883, filed on 30.07.2024, published on 16.08.2024). She, along with **N. R. Raghapriya (M.Tech CSE)**, also filed a joint patent titled “Machine Learning-Driven Wearable Sensor for Monitoring and Classification of Health Issues in Personalized Healthcare” (Application No. 202441069620, filed on 14.09.2024, published on 20.09.2024).
- Ms. **S. Sree Vidhya** submitted “Integration of Artificial Intelligence in EFL Learning of Higher Education to Understand the Perspectives of Teachers and Learners” (Application No. 202441075653, filed on 07.10.2024, published on 18.10.2024).
- Ms. **M. Amshavalli** filed two patents—“Innovative Image Processing and Machine Learning Methods for Kidney Stone Detection in CT Scans” (Application No. 202441062161, filed on 16.08.2024, published on 23.08.2024) and “Enhancing Power Stability in EV Charging with Grid-Photovoltaic (PV) Hybrid Systems and Machine Learning” (Application No. 202521018490, filed on 03.03.2025, published on 14.03.2025).
- Ms. **T. Kalaiselvi** filed a patent on “Agricultural Innovation: IoT and Machine Learning for Crop Health Monitoring and Management System” (Application No. 202441057549, filed on 30.07.2024, published on 02.08.2024).
- Mr. **U. Gowri Sankar** submitted “Implementation of Machine Learning Approaches for Supply Chain Optimization through HR Predictive Analytics in E-Commerce” (Application No. 202441073203, filed on 27.09.2024, published on 04.10.2024).
- Dr. **Vaduganathan D.** filed “Machine Learning-Enhanced Security and Privacy in 6G Wireless Communication using FOG and Edge Computing” (Application No. 202441098526, filed on 13.12.2024, published on 20.12.2024).
- Additionally, three patents have been **granted** during this period. Dr. **Rohini J.** received a grant for “AI-Based Network Intrusion Detection Device” (Application No. 424997-001, granted on 29.07.2024) and “Wireless Networking Device for Controlling Home Appliances” (Application No. 6368709, granted on 11.06.2024).
- Ms. **S. Sree Vidhya** was granted a patent for “AI-Based Device for Monitoring



Social Responsibility” (Application No. 422835-001, granted on 13.09.2024).

4. Details of Paper Presented by the Students (Online and Offline)

- The students of the Department of Computer Science and Engineering actively participated in various technical symposiums, conferences, and paper presentation events held across reputed engineering institutions during the academic year 2024–2025. Their enthusiastic involvement reflects the department’s commitment to promoting research aptitude, innovation, and technical communication skills among students.
- Students **Lashwanth P, Mohan Raj D, and Harsath Mohamed S** presented their paper titled “Waste to Energy” at **Hindusthan Institute of Technology, Coimbatore, on 22nd and 23rd August 2024. Subaranjani M, Ranganayaki K S, and Varnamalya S** also participated in a paper presentation event held at the same institution on **24th and 25th September 2024.**
- Further, **Boopathi P and Janani S** presented their paper on “Machine Learning” at **KSR College of Engineering, Tiruchengode, on 27th September 2024. Santhakumar M** participated in a technical event at **Velalar College of Engineering and Technology, Erode, on 5th October 2024. Safrin Suhaina A, Thirisha E, and Prabhakaran S** represented the department at **Kongu Engineering College, Erode, on 9th October 2024.**
- Additionally, **Janani V and Harini S** presented their research papers at **Government College of Engineering, Erode, held on 24th and 25th October 2024.**

5. Participation by Students in Seminar / National / International Conferences (Online and Offline)

- The students of the Department of Computer Science and Engineering actively participated in various national-level seminars and conferences, showcasing their enthusiasm for emerging technologies and research advancements. A group of students, including **Mouliswaran D, Jayalakshmi M, Santha Kumar M, Gouri Nandhana C.P, Jeevitha S, Gopika Devi C.N, Jayaram V, Sri Krishna P, and Jeric Joel J,** took part in the **National Level Seminar on “Embracing Future Trends and Predictions of Quantum Computing and Extended Reality (XR) in the Automotive Industry”** conducted at **Erode Sengunthar Engineering College, Erode, from 17th to 18th October 2024.**
- Their participation in this seminar provided valuable exposure to the latest technological developments in **Quantum Computing and Extended Reality,** enhancing their understanding of futuristic innovations and industrial applications. Such active involvement in academic forums highlights the department’s continuous encouragement for students to engage in knowledge-sharing platforms and stay abreast of global technological trends.

6. Workshop Attended by the Students (Online and Offline)

The students of the Department of Computer Science and Engineering actively participated in several workshops conducted by reputed institutions and organizations, both online and



offline, to enhance their technical expertise and practical skills in emerging technologies.

- **Suman Kumar** attended a two-day workshop on “AI & ML – Diving Deep into Deep Learning” at **PSG Institute of Technology, Coimbatore**, while **Moulishwaran** participated in a two-day workshop on “Spring Boot (Expert from Adobe)” at **Madras Institute of Technology, Chennai**. **Aravind S** attended a one-day session on “Detection Techniques for Identifying AWS IAM Targeted Attacks – Part 2” conducted by **Cyber Warfare Labs**.
- A group of students — **Mathivanan T, Deepak G, Mohan Raj D, Poornakalai S, Shreeja T, and Gajini Prasath G** — took part in a two-day creative workshop titled “Film Fusion” at **Erode Sengunthar Engineering College**. Similarly, **Lashwanth P** and **Manjula S** attended a one-day “Arduino” workshop organized by the **Rotaract Club, Coimbatore**.
- **Thakshin Fazeela** participated in a one-day session on “UI/UX Design with Figma” at **KSR College of Engineering, Tiruchengode**, while **Jeevitha C** attended a workshop on “UI/UX Designing” at **SDLC, Erode**. A large group comprising **Mohana Akshaya V S, Sabari V, Brindha M, Kalaiyarasi S, Kaviya D, Dhivya R S, Bhuvaneshwari S, Dhayanathan N, and Kiruba T** attended a one-day workshop on “Real-Time Implementation of GenAI” at **Karpagam College of Engineering, Coimbatore**.

- Additionally, **Shanmuga Priya P, Subasri B, and Safrin Suhaina A** took part in a one-day workshop on “Digital Marketing Tools & Techniques” at **Excel Engineering College, Komarapalayam**. **Vinoth S** attended a two-day session on “Python and GenAI” conducted by **Learnix Thrive**, and **Prabhakaran S** participated in a workshop on “Advanced 3D Printing.”

7. Internship Training Attended by the Students

The students of **III Year B.E. Computer Science and Engineering** actively participated in internship training programs to gain practical exposure and industry-oriented learning experience.

A group of students — **Dhana Sri N, M. Barsha, Bavatharani M, Anushiya P, Charukesi S, C.N. Gopika Devi, and Jeevadharsini G.K** — from **III-CSE-A** batch, and **Bavatharani M** from **III-CSE-B** batch, successfully completed their internship training at **Techvolt Software Pvt. Ltd., Coimbatore**, from **2nd September 2024 to 10th September 2024**.

This internship program provided them with valuable hands-on experience in software development, real-time project handling, and the practical application of programming concepts.

It also enhanced their understanding of industry practices, teamwork, and professional work culture, thereby bridging the gap between academic learning and industry requirements.

8. Industrial Training Taken by the Students



To enhance their practical knowledge and industry readiness, a group of students — **E.K. Jayaprakash, M. Kannan, Hariharan, Kavibharthi, and Lakshman** — underwent **industrial training at Duo Dev Technologies from 18th September 2024 to 8th October 2024.**

During this period, the students gained hands-on exposure to real-time software development processes, project management techniques, and current industrial tools and technologies. The training provided them with valuable insights into the functioning of the IT industry, strengthening their technical competence and preparing them for future professional challenges.

9. NPTEL Courses Done by the Students

To enhance their technical knowledge and align with current industry trends, students actively participated in NPTEL (National Programme on Technology Enhanced Learning) online certification courses offered by IITs and IISc.

- A total of 93 students successfully completed various NPTEL courses during the academic year, showcasing their commitment to continuous learning and professional development.
- Among them, many students achieved “Elite” certification, reflecting outstanding performance and deep conceptual understanding. The most popular courses were “Problem Solving Through Programming in C” and “Foundation of Cloud IoT Edge ML”, each spanning 12 weeks, where a large number of students earned Elite ranks or successfully completed the program.
- These courses helped students strengthen their programming skills and gain hands-on exposure to cloud computing, Internet of

Things (IoT), and machine learning concepts.

- Additionally, students such as Praveen S and Ruthik K pursued specialized courses in Natural Language Processing and Blockchain and Its Applications, respectively.
- Their participation in these advanced domains highlights the department’s emphasis on encouraging learners to explore emerging technologies beyond the curriculum.

10. Journal Publications by the Faculty

- The faculty members of the Department of Computer Science and Engineering have actively contributed to research and development through numerous journal and conference publications during the academic year 2024–2025. Their research spans diverse and emerging areas such as cloud computing, machine learning, artificial intelligence, healthcare systems, IoT applications, cybersecurity, and big data analytics.
- Dr. T. Kalai Selvi published papers titled “Analysis of Big Data Representation and Storage Performance in a Smart Healthcare Environment” in the Journal of Information Systems Engineering and Management (2025) and “Virtual Mouse Implementation with Hand Gesture Recognition using OpenCV and VNC” in AIP Conference Proceedings (2024).
- Dr. G. Sivakumar contributed significantly with publications such as “An Efficient Investigation of Cloud Computing Security with Machine Learning Algorithm” in the 7th International Conference on Inventive Computation Technologies (ICICT 2024) and “Automated Group Discussion



Feedback and Scoring with AI” in IRJAEH (April 2025).

- Mrs. R. Punitha Gowri and Dr. G. Saravanan jointly authored “Survey on Remote Patient Monitoring System” presented at the 9th International Conference on Communication and Electronics Systems (ICCES 2024).



- Mr. E. Loganathan presented “Attention-Based RNN for Alzheimer’s Diagnosis: A Multi-Modal Approach with Enhanced Feature Retention Algorithm” at InCoWoCo 2024.



- Mrs. S. Sree Vidhya published “RFID-based Automatic Mask Dispensing System using IoT” in ICACRS 2024 and “Boosting EFL Learners’ Speaking Skills and

Motivation Through Dual Graph Neural Networks” in ICDSNC 2024.

- Mr. M. Sakthivel made notable contributions through his works “Detection of Autism Disorder using Machine Learning Techniques” in ICECA 2024 and “Alcohol Detection-Based Vehicle Speed Limits and Notification System” in IJRAR (2024), alongside a collaborative study with Dr. G. Saravanan titled “An Empirical Investigation of Docker Sockets for Privilege Escalation and Defensive Strategies” published in Procedia Computer Science (2024).
- Further, Mrs. J. Rohini authored papers on “Risk Modelling and Prediction of Financial Management Using FTL-CSGRU Approach” in ICECCC 2024 and “Smart Aeroponic Farms with IoT-Enabled Efficient Automation and Monitoring” in AIMLA 2024.
- Mr. D. Vaduganthan contributed with his research on “Advancements in Criminal Justice Technologies: Enhancing Prevention, Investigation, and Efficiency” in Telematique (2024) and “Intelligent Smoke and Haze Removal Using Machine Learning” in the International Journal of Research Publication and Reviews.
- Additionally, Mr. U. Gowri Sankar published “Advanced Encryption Standard Algorithm for Dynamic Task Scheduling and Security over Cloud Computing” in JEET (February 2025), reflecting continued efforts to enhance cloud security through innovative cryptographic approaches.
- Overall, these publications reflect the department’s strong emphasis on research excellence, interdisciplinary collaboration, and knowledge dissemination in the field of



computer science and its real-world applications.

11. Publications by the Faculty Members in National/International Conferences & Book Chapters Published

The faculty members of the Department have actively contributed to research and knowledge dissemination through numerous publications and conference presentations at national and international levels during the academic year 2024–2025.

- Dr. Kalai Selvi T has made remarkable contributions by presenting multiple research papers on cutting-edge topics such as Real-Time Monitoring of Fatigue-Induced Damage in Stainless Steel using Acoustic Emission and Machine Learning Techniques at the International Conference on Materials Innovation in Engineering and Technology (ICMIET-2024) held at M.I.E.T Engineering College, Tiruchirapalli; Detection of Disease using Machine Learning Techniques at the International Conference on Integrating Social Work, Science, Engineering and Management (ICSWSEM 2024), Nehru Arts and Science College, Coimbatore; Fake Profile Identification in e-Learning Platforms, Autonomous Driving Systems, and Fake Account Detection in LinkedIn Platforms, presented at various reputed international conferences across Tamil Nadu.



- Mr. Loganathan E presented his research on A Hybrid Approach to Sentiment Analysis at the ICMCTT-IV 2024, Kerala, and another work titled Attention-Based RNN for Alzheimer's Diagnosis at the First IEEE International Conference for Women in Engineering (INCOWOCO 2024), Pune.
- Dr. Amshavalli M has showcased extensive research work in areas such as sustainable agriculture, healthcare, and financial analytics. Her papers include Enhancing Sustainable Agriculture through Smart Architecture, Advanced Deep Learning Framework for Early Breast Cancer Detection, Fake Feedback Detection Using Machine Learning, Predictive Segment Analysis in Atopic Eczema, Non-Linear Stock Market Prediction using SVM, and AIoT-Based Biogas Systems. These were presented at reputed national and international platforms such as ICSCNA 2024, ICETS'25, and ICIECST-2025.



- Ms. Punitha Gowri R presented her works on Plant Disease Detection using Machine Learning, Survey on Remote Patient Monitoring System, and Smart Prescription Recognition and Symptom Analysis for Healthcare Solutions at conferences including ICCES 2024, EMPOWER 2025, and ICFTSEM-II 2025.



- Ms. Rohini J presented research papers on Fake Currency Detection using Image Processing Systems and Smart Wearable Band for Proactive Bovine Health Monitoring at ICFTSEM-II 2025 and IConSCEPT 2024, respectively.
- Ms. Sree Vidhya S demonstrated research expertise through papers such as RFID-Based Automatic Mask Dispensing System using IoT, IoT-Based Transfer Learning for Smart Pollution Detection, and Attribute-Based Cloud Data Integrity Auditing, presented at ICACRS 2024, ICAECT 2025, and ICRAECA-2025.
- Mr. Vaduganthan D contributed through his research on Intelligent Horticultural Surveillance and Automation System and Campus Placement Prediction using Machine Learning, presented at Dr. N.G.P.

Arts and Science College and ICMCTT-IV 2024 respectively.

- Mr. Sakthivel M presented his works titled Waste to Energy and Alcohol Detection-Based Vehicle Speed Limits and Notification System at conferences hosted by Hindusthan Institute of Technology and Saveetha Engineering College, Chennai.
- Mr. Parthiban R presented papers on Crime Hotspot Detection and Future Crime Prediction using Machine Learning and Automated Inventory Tracking and Alert System at LJ University and Inventive Research Organisation.
- Finally, Ms. Revathi S presented her research titled Intelligent Recipe Recommendation using Machine Learning at the Fourth International Conference on Modern Computing Trends and Technology (ICMCTT-IV 2024) held at Kristu Jyoti College of Management and Technology, Kerala.

12. Publications by the Faculty Members in Book Chapters – Published

The faculty members of the Department have made significant academic contributions through the publication of book chapters in reputed national and international publishers during the year 2024.

- Mr. M. Sakthivel** authored a chapter titled “Ethical Hacking” published by **Prime International Publication** (ISBN: 978-93-6010-384-2), highlighting key concepts and modern approaches in cybersecurity and ethical hacking practices.
- Mr. V. Thirumurugan, Dr. G. Sivakumar, and Ms. T. Kalai Selvi** jointly contributed a chapter titled “Artificial Intelligence in Tamil Nadu” published by **Imaginex Inks Publication** (ISBN: 978-81-982083-6-1), which explores the emerging applications



of artificial intelligence across various domains within the state.

- **Ms. J. Rohini** authored a chapter on “Machine Learning and Artificial Intelligence” published by **RK Publications** (ISBN: 978-93-48020-74-1), focusing on the fundamental principles and advancements in AI and ML technologies.
- **Ms. S. Sree Vidhya** contributed two chapters — “Deep Learning: Foundation and Advancements” (ISBN: 978-93-48020-96-3) and “Data Structures and Algorithm Analysis” (ISBN: 978-93-48655-10-3), both published by **RK Publications**, emphasizing her expertise in data science and computational intelligence.
- **Mr. R. Parthiban** has authored two insightful chapters — “Introduction to AI Tools: Transforming Your Imagination into Reality” published by **Prime International Publication** (ISBN: 978-98-6010-688-1), and “An Overview of Semantic Web” (ISBN: 978-93-6010-471-9) published by the same publisher in **October 2024**, showcasing his contributions to artificial intelligence and web technologies.
- **Ms. M. Amshavalli** has also made notable contributions through her book chapters titled “Anomaly Detection Algorithms in Cyber Security” published by **IGI Global** (ISBN: 979-8-3693-7540-2), and “Variational Quantum Eigensolver Applications in Quantum Machine Learning” published by **RAD Emics** (ISBN: 978-81-979336-4-6). Her works reflect a deep engagement with cybersecurity analytics and quantum machine learning research.

13. FDPs Organized by the Faculty – Online and Offline

The faculty members of the Department actively organized Faculty Development Programmes (FDPs) in collaboration with NITTTR Chandigarh, conducted both in online mode and through the remote centre at ESEC.

- Mr. M. Sakthivel organized a five-day Short Term Training Programme (STTP) on “ICT-49: Cryptography and Network Security” from 16th to 20th September 2024, aimed at enhancing faculty knowledge in modern cryptographic techniques and secure networking practices.
- Ms. S. Revathi coordinated another five-day STTP on “ICT-59: Tools for Research in Cloud, Fog, and Edge Computing” from 21st to 25th October 2024, focusing on advanced computing paradigms and research tools relevant to distributed systems.
- Additionally, Mr. M. Sakthivel organized yet another five-day FDP on “ICT-70: Open Source Applications in Engineering Education” from 18th to 22nd November 2024, providing faculty participants with insights into the use of open-source technologies in teaching and research.

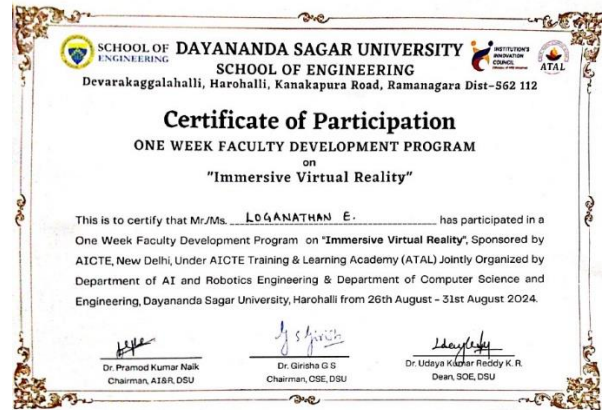
14. FDPs / STTPs Attended by the Faculty – Online and Offline

The faculty members of the Department of Computer Science and Engineering actively participated in several Faculty Development Programmes (FDPs), Short Term Training Programmes (STTPs), Professional Development Programmes (PDPs), and seminars organized by reputed institutions and national agencies during the academic year 2024–2025.



- **Ms. T. Kalai Selvi** attended various FDPs including “Mathematical Approach to Artificial Intelligence and Machine Learning Algorithms” at PSG Institute of Technology and Applied Research from **23rd to 27th July 2024**, “MEAN Stack” at NITTTR, Chennai from **5th to 9th August 2024**, and “Cryptography and Network Security” at NITTTR, Chandigarh from **16th to 20th September 2024**.
- **Mr. M. Sakthivel** participated in multiple FDPs such as “OpenCV for Image and Video Processing Applications” (22nd–26th July 2024), “MEAN Stack” (5th–9th August 2024), “Cryptography and Network Security” (16th–20th September 2024), “Tools for Research in Cloud, Fog and Edge Computing” (21st–25th October 2024), and “Open Source Applications in Engineering Education” (18th–22nd November 2024), all organized by NITTTR Chandigarh. He also attended a six-day FDP on “Integrating AI, Supercomputing, and Quantum Computing for Future Innovation” at Sengunthar Engineering College from **16th to 21st December 2024**.

Sengunthar Engineering College (2nd–14th September 2024), and “Cryptography and Network Security” and “Tools for Research in Cloud, Fog and Edge Computing” at NITTTR, Chandigarh.



- **Ms. M. Amshavalli** attended several FDPs and PDPs organized by NITTTR, Chennai, and PSG iTech, including “Professional Development Programme” (10th–14th June 2024), “Faculty Development Programme” (16th–20th September 2024), and “An FDP on Deep Learning and AI” (25th–29th November 2024). She also participated in seminars at Kongu and Excel Engineering Colleges during October 2024.
- **Ms. R. Punitha Gowri** participated in six FDPs organized by AICTE, DRDO, and NITTTR on topics such as “Image and Video Analytics”, “Deep Learning for Engineering Applications”, “Cryptography and Network Security”, and “Tools for Research in Cloud, Fog and Edge Computing”. These were held at institutions including KPR Institute of Engineering and Technology, Erode Sengunthar Engineering College, and Kongu Engineering College during June–October 2024.



- **Mr. E. Loganathan** participated in FDPs such as “Immersive Virtual Reality” at Dayananda Sagar University (26th–31st August 2024), “Hands-on Journey into Artificial Intelligence Mastery” at Erode



- **Ms. J. Rohini** attended multiple FDPs conducted by NITTTR, PSG Institute of Technology and Applied Research, and Kongu Engineering College between **June and November 2024**, covering subjects like Network Security, AI, and Research Tools.
- **Ms. S. Sree Vidhya** participated in several FDPs organized by NITTTR, PSG iTech, and other institutions between **June 2024 and January 2025**, including sessions on Applied AI, Data Analytics, Cloud Research Tools, and Internet of Things.
- **Mr. D. Vaduganthan** attended FDPs on “Artificial Intelligence Mastery” organized by AICTE, “RDBMS using PostgreSQL” by NITTTR, “Cryptography and Network Security” at NITTTR Chandigarh, and “Immersive Virtual Reality” at Dayananda Sagar University between **August and September 2024**.
- **Mr. R. Parthiban** participated in FDPs such as “Web Application Frameworks”, “RDBMS using PostgreSQL”, “MEAN Stack”, and “Tools for Research in Cloud, Fog and Edge Computing” organized by NITTTR Chennai and Chandigarh, and a programme on “Current Trends in IT Industry” at Sri Venkateswara College of Engineering.

- **Ms. M. Kowsalya** attended the ATAL Basic FDP on sive Virtual Reality at Dayananda Sagar University from **26th to 31st August 2024**.



- **Ms. S. Revathi** actively participated in FDPs on Internet of Things, Cloud Research Tools, Applied AI, and Network Security at NITTTR, NPTEL, and Kongu Engineering College from **July to November 2024**.
- **Mr. U. Gowrishankar** attended multiple ATAL and NITTTR FDPs on AI, Cloud Computing, and Advanced Research Tools at Erode Sengunthar Engineering College, K. Ramakrishnan College of Engineering, and Hindusthan College of Arts and Science during **September–October 2024**.

15.WORKSHOP ORGANIZED BY THE FACULTY ONLINE AND OFFLINE

During the academic year, the department organized a series of workshops both online and offline to enhance students’ technical knowledge and industry readiness.

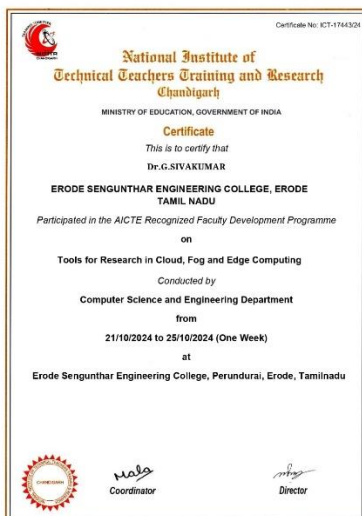
- **Ms. S. Revathi** and **Mr. M. Sakthivel** jointly conducted a Workshop on Business Analytics using Microsoft Power BI at Erode Sengunthar Engineering College on 2nd September 2024, providing



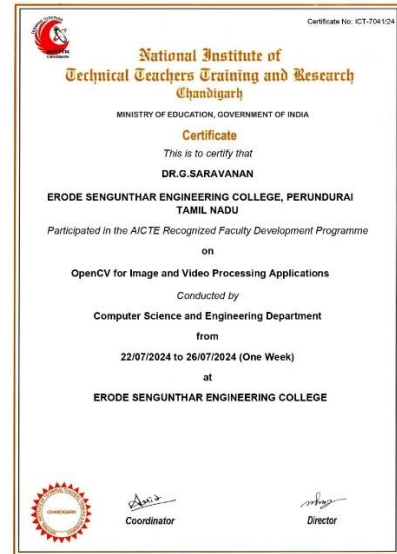


participants with insights into data analytics and visualization techniques. Following this, Mrs. T. Kalaiselvi and Mr. M. Sakthivel organized a Two-Day Workshop on “MERN Stack Web Development” on 4th and 5th October 2024, focusing on full-stack development using modern web technologies.

- Ms. M. Amshavalli conducted a Workshop on “Advanced Ensemble Methods in Machine Learning for Predictive Analysis” on 23rd October 2024, which offered in-depth exposure to advanced machine learning techniques. Additionally, Mr. U. Gowrisankar organized a Workshop on “Building a Career in Cybersecurity: Roles, Certificates, and Skillsets” on 14th November 2024, aimed at guiding students toward career opportunities and certifications in the cybersecurity field.
- Dr. G. Sivakumar, Professor, attended a 1-week FDP on “Tools for Research in Cloud, Fog and Edge Computing” organized by the National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh, from 21-10-2024 to 25-10-2024.



- Dr. G. Saravanan, Professor, attended a 1-week FDP on “OpenCV for Image and Video Processing Applications” organized by the National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh, from 22-07-2024 to 26-07-2024.



- Dr. G. Saravanan, Immer Professor, attended a 5-day Online FDP on “Current Trends in IT Industry” organized by Sri Venkateswara College of Engineering, Sriperumbudur, from 21-10-2024 to 25-10-2024.
- Dr. G. Saravanan, Professor, participated in the International Conference on “Recent Advances in Computer Science and Information Technology” (ICRACSIT) organized by the World Research Forum for Engineers and Researchers, Thiruvananthapuram, on 14-11-2024.
- Dr. G. Saravanan, Professor, attended the Fourth International Conference on “Modern Computing Trends and Technology” (ICMCTT-IV 2024) organized by Kristu Jyoti College of



Management and Technology, Kerala, from 28-11-2024 to 29-11-2024.



- Dr. G. Saravanan, Professor, attended the International Conference on “Data, Computation and Communication” (ICDCC-2024) organized by VIT, Bhopal, from 29-11-2024 to 30-11-2024.
- Dr. G. Saravanan, Professor, participated in the International Conference on “Communication and Electronics Systems” (ICCES-2024) organized by PPG Institute of Technology, Coimbatore, from 16-12-2024 to 18-12-2024.
- Dr. K. Saravanan, Professor, attended a 2-week FDP on “Embark on a Hands-on Journey into Artificial Intelligence Mastery” organized by AICTE ATAL, New Delhi, from 02-09-2024 to 14-09-2024.



- Dr. K. Saravanan, Professor, attended a 5-day Online FDP on “Current Trends in IT Industry” organized by Sri Venkateswara College of Engineering, Sriperumbudur, from 21-10-2024 to 25-10-2024. Dr. K. Saravanan, Professor, participated in the International Conference on “Recent Advances in Computer Science and Information Technology” (ICRACSIT) organized by the World Research Forum for Engineers and Researchers, Thiruvananthapuram, on 14-11-2024.
- Dr. R. V. Nataraj, Professor, attended a 2-week FDP on “Embark on a Hands-on Journey into Artificial Intelligence Mastery” organized by AICTE ATAL, New Delhi, from 02-09-2024 to 14-09-2024.



- Dr. R. V. Nataraj, Professor, attended a 5-day Online FDP on “Current Trends in IT Industry” organized by Sri Venkateswara College of Engineering, Sriperumbudur, from 21-10-2024 to 25-10-2024.
- Dr. R. V. Nataraj, Professor, participated in the International Conference on “Recent Advances in Computer Science and Information Technology” (ICRACSIT) organized by the World Research Forum for Engineers and Researchers, Thiruvananthapuram, on 14-11-2024.

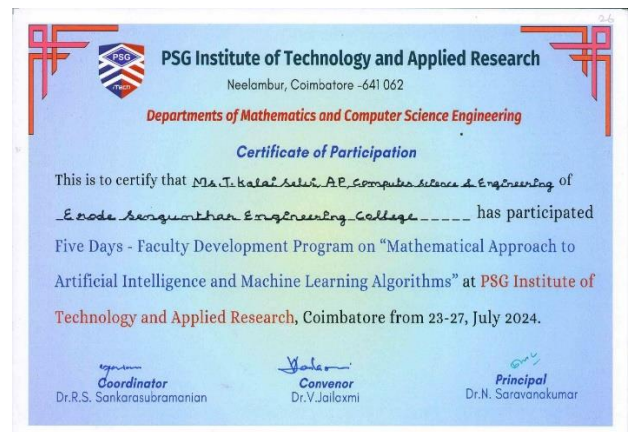


- Dr. J. Vijay Franklin, Professor, attended a 5-day Online FDP on “Current Trends in IT Industry” organized by Sri Venkateswara College of Engineering, Sriperumbudur, from 21-10-2024 to 25-10-2024.
- Dr. J. Vijay Franklin, Professor, attended a 1-week FDP on “Applied AI: Practical Implementations” organized by Microsoft India and SAP India from 18-11-2024 to 22-11-2024.



- Dr. N. Yuvaraj, Professor, participated in the International Conference on “Recent Advances in Computer Science and Information Technology” (ICRACSIT) organized by the World Research Forum for Engineers and Researchers, Thiruvananthapuram, on 14-11-2024. Dr. N. Yuvaraj, Professor, attended a 1-week FDP on “Applied AI: Practical Implementations” organized by Microsoft India and SAP India from 18-11-2024 to 22-11-2024.
- Ms. T. Kalai Selvi, Assistant Professor, attended a 5-day FDP on “Mathematical Approach to Artificial Intelligence and Machine Learning Algorithms” organized by PSG Institute of Technology and Applied Research, Coimbatore, from 23-07-2024 to 27-07-2024.

- Dr. J. Vijay Franklin, Professor, participated in the International Conference on “Recent Advances in Computer Science and Information Technology” (ICRACSIT) organized by the World Research Forum for Engineers and Researchers, Thiruvananthapuram, on 14-11-2024.
- Dr. N. Yuvaraj, Professor, attended a 5-day Online FDP on “Current Trends in IT Industry” organized by Sri Venkateswara College of Engineering, Sriperumbudur, from 21-10-2024 to 25-10-2024.



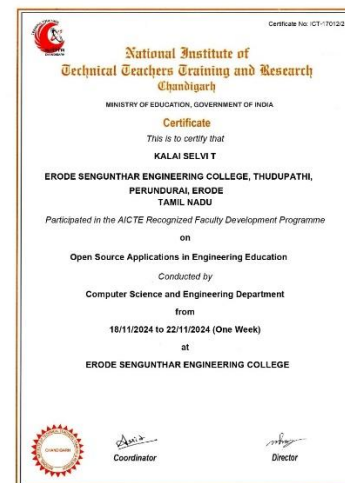


- Ms. T. Kalai Selvi, Assistant Professor, attended a 1-week FDP on “MEAN Stack” organized by the National Institute of Technical Teachers Training and Research, Chennai, from 05-08-2024 to 09-08-2024.



- Ms. T. Kalai Selvi, Assistant Professor, participated in the International Conference on “Engineering and Technology” (ICET-2024) organized by Marthandam College of Engineering and Technology, Kanyakumari, on 28-10-2024.
- Ms. T. Kalai Selvi, Assistant Professor, attended a 1-week FDP on “Open Source Applications in Engineering Education” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 18-11-2024 to 22-11-2024.

- Ms. T. Kalai Selvi, Assistant Professor, participated in the International Conference on “Materials Innovation in Engineering and Technology” (ICMIET-2024) organized by M.I.E.T. Engineering College, Pudukkottai, on 22-08-2024 and 23-08-2024.
- Ms. T. Kalai Selvi, Assistant Professor, attended a 1-week FDP on “Cryptography and Network Security” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 16-09-2024 to 20-09-2024.
- Ms. T. Kalai Selvi, Assistant Professor, participated in the International Conference on “Integrating Social Work, Science, Engineering and Management” (ICSWSEM-2024) organized by Nehru Arts and Science College, Coimbatore, on 25-10-2024 and 26-10-2024.



- Ms. S. Revathi, Assistant Professor, attended a one-day Webinar on “Generative AI” organized by SRM Madurai College for



Engineering and Technology, Sivagangai,
on 26-07-2024.



Certificate of Participation

This is to certify that *Ms. S. Revathi* has attended ISTE Webinar on "**Generative AI**" organized by the Department of Electronics and Communication Engineering, SRM Madurai College for Engineering and Technology, Pottapalayam, Sivagangai Dt, on 26.07.2024.

[Signature]

Coordinator
Dr.P.Tharcis
ASP / ECE

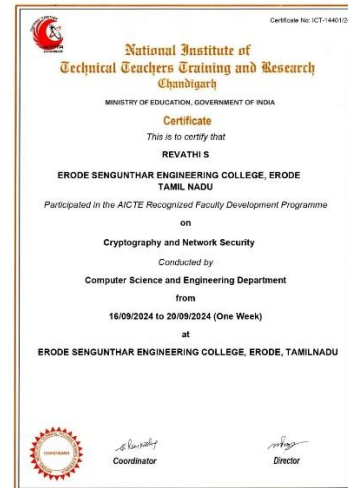
[Signature]

Co Convener
Dr. C. Vimalarani
HOD / EEE & ECE

[Signature]

Convener
Dr. S. Durairaj

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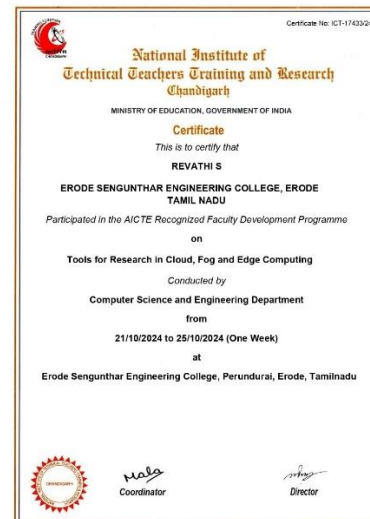


- Ms. S. Revathi, Assistant Professor, attended a one-week FDP on "MEAN Stack" organized by the National Institute of Technical Teachers Training and Research, Chennai, from 05-08-2024 to 09-08-2024.

- Ms. S. Revathi, Assistant Professor, attended a one-week FDP on "Tools for Research in Cloud, Fog and Edge Computing" organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 21-10-2024 to 25-10-2024.



- Ms. S. Revathi, Assistant Professor, attended a one-week FDP on "Cryptography and Network Security" organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 16-09-2024 to 20-09-2024.



- Ms. S. Revathi, Assistant Professor, attended a one-week FDP on "Applied AI: Practical Implementations" organized by Microsoft India and SAP India from 18-11-2024 to 22-11-2024.



- Ms. S. Revathi, Assistant Professor, participated in the Fourth International Conference on “Modern Computing Trends and Technology” (ICMCTT – IV 2024) organized by Kristu Jyoti College of Management and Technology, Kerala, on 28-11-2024 and 29-11-2024.



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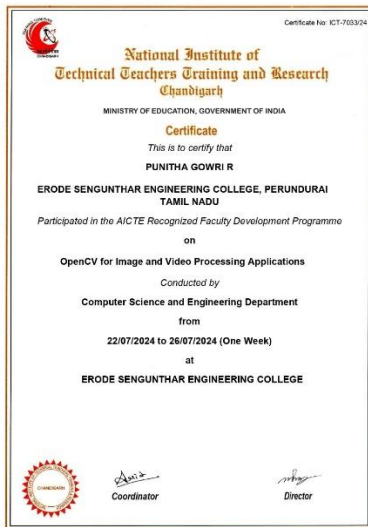
- Mr. U. Gowrisankar, Assistant Professor, attended a two-week FDP on “Embark on a Hands-on Journey into Artificial Intelligence Mastery” organized by AICTE ATAL, New Delhi, from 02-09-2024 to 14-09-2024.
- Mr. U. Gowrisankar, Assistant Professor, attended a one-week FDP on “Machine Learning Techniques and its Real-Time Applications” organized by AICTE ATAL, K. Ramakrishnan College of Engineering,

Samayapuram, from 14-10-2024 to 19-10-2024.

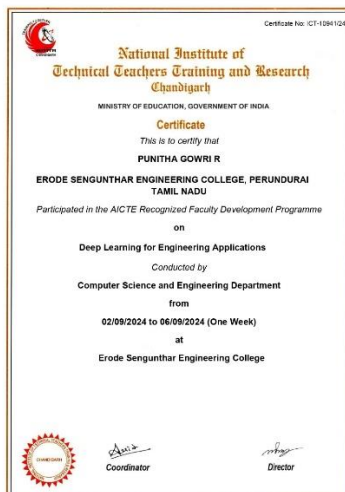
- Mr. U. Gowrisankar, Assistant Professor, attended a one-week FDP on “Tools for Research in Cloud, Fog and Edge Computing” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 21-10-2024 to 25-10-2024.
- Mr. U. Gowrisankar, Assistant Professor, participated in the International E-Conference on “Emerging Trends in Education, Research and Innovation” organized by ACN College of Engineering & Management Studies, Aligarh, on 21-10-2024 and 22-10-2024.
- Ms. R. Punitha Gowri, Assistant Professor, attended a six-day FDP on “CCS349 - Image and Video Analytics” organized by KPR Institute of Engineering and Technology, Coimbatore, from 10-06-2024 to 15-06-2024.



- Ms. R. Punitha Gowri, Assistant Professor, attended a one-week FDP on “OpenCV for Image and Video Processing Applications” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 22-07-2024 to 26-07-2024.



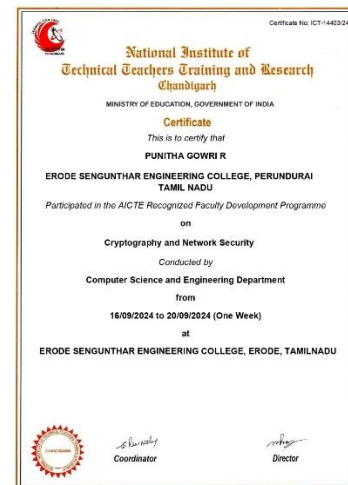
- Ms. R. Punitha Gowri, Assistant Professor, attended a one-week FDP on “Deep Learning for Engineering Applications” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 02-09-2024 to 06-09-2024.



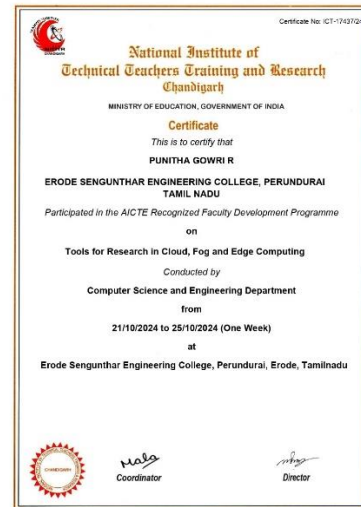
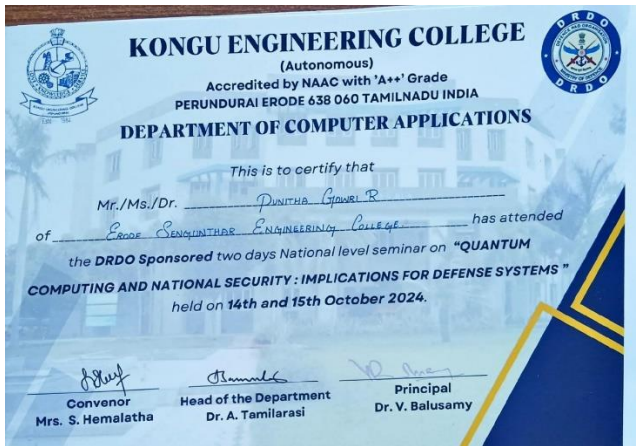
- Ms. R. Punitha Gowri, Assistant Professor, attended a two-week FDP on “Embark on a Hands-on Journey into Artificial Intelligence Mastery” organized by AICTE ATAL, New Delhi, from 02-09-2024 to 14-09-2024.



- Ms. R. Punitha Gowri, Assistant Professor, attended a one-week FDP on “Cryptography and Network Security” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 16-09-2024 to 20-09-2024.



- Ms. R. Punitha Gowri, Assistant Professor, participated in a two-day seminar on “Quantum Computing and National Security: Implications for Defense Systems” organized by Kongu Engineering College, Erode, on 14-10-2024 and 15-10-2024.



- Ms. R. Punitha Gowri, Assistant Professor, participated in the International E-Conference on “Emerging Trends in Education, Research and Innovation” organized by ACN College of Engineering & Management Studies, Aligarh, on 21-10-2024 and 22-10-2024.



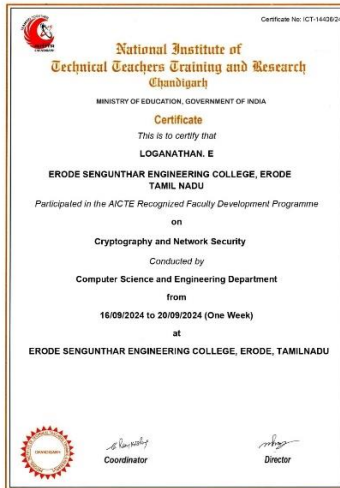
- Ms. R. Punitha Gowri, Assistant Professor, participated in the International Conference on “Communication and Electronics Systems” (ICCES-2024) organized by PPG Institute of Technology, Coimbatore, from 16-12-2024 to 18-12-2024.
- Mr. E. Loganathan, Assistant Professor, attended a one-week FDP on “Immersive Virtual Reality” organized by Dayananda Sagar University, Harohalli, from 26-08-2024 to 31-08-2024.
- Mr. E. Loganathan, Assistant Professor, attended a two-week FDP on “Embark on a Hands-on Journey into Artificial Intelligence Mastery” organized by AICTE ATAL, New Delhi, from 02-09-2024 to 14-09-2024.

- Ms. R. Punitha Gowri, Assistant Professor, attended a one-week FDP on “Tools for Research in Cloud, Fog and Edge Computing” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 21-10-2024 to 25-10-2024.

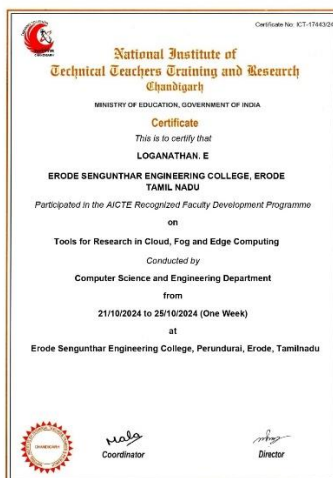




- Mr. E. Loganathan, Assistant Professor, attended a one-week FDP on “Cryptography and Network Security” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 16-09-2024 to 20-09-2024.



- Mr. E. Loganathan, Assistant Professor, attended a one-week FDP on “Tools for Research in Cloud, Fog and Edge Computing” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 21-10-2024 to 25-10-2024.



- Mr. E. Loganathan, Assistant Professor, participated in the “IEEE International Conference for Women in Engineering” (INCOWOCO 2024) organized by Symbiosis Institute of Computer Studies and Research, Pune, on 14-11-2024 and 15-11-2024.
- Mr. E. Loganathan, Assistant Professor, participated in the Fourth International Conference on “Modern Computing Trends and Technology” (ICMCTT – IV 2024) organized by Kristu Jyoti College of Management and Technology, Kerala, on 28-11-2024 and 29-11-2024.



- Mr. E. Loganathan, Assistant Professor, participated in the United International Conference on “Technologies, Research, Product Development and Space Science” organized by United Institute of Technology, Coimbatore, on 28-05-2025.
- Ms. R. Manimekala, Assistant Professor, attended an online FDP on “Current Trends in IT Industry” organized by Sri Venkateswara College of Engineering, Sriperumbudur, from 21-10-2024 to 25-10-2024.
- Ms. R. Manimekala, Assistant Professor, participated in the Fourth International Conference on “Modern Computing Trends and Technology” (ICMCTT – IV 2024)



organized by Kristu Jyoti College of Management and Technology, Kerala, on 28-11-2024 and 29-11-2024.

- Ms. R. Manimekala, Assistant Professor, attended a five-day FDP on “Intelligent Computing Techniques and Its Engineering Applications” organized by the College of Engineering & Management, Kolaghat, from 06-01-2025 to 10-01-2025.
- Mr. D. Vaduganathan, Assistant Professor, attended a one-week FDP on “Java Programming” organized by Infosys Springboard from 01-07-2024 to 05-07-2024.
- Mr. D. Vaduganathan, Assistant Professor, attended a three-day FDP on “RDBMS using PostgreSQL” organized by the National Institute of Technical Teachers Training and Research, Chennai, from 08-07-2024 to 10-07-2024.

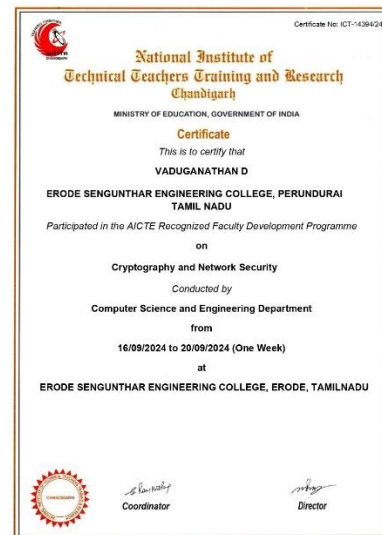
ATAL, New Delhi, from 02-09-2024 to 14-09-2024.



- Mr. D. Vaduganathan, Assistant Professor, attended a one-week FDP on “Cryptography and Network Security” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 16-09-2024 to 20-09-2024.



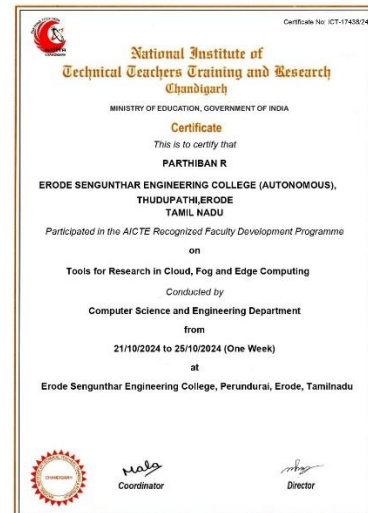
- Mr. D. Vaduganathan, Assistant Professor, attended a one-week FDP on “Immersive Virtual Reality” organized by Dayananda Sagar University, Harohalli, from 26-08-2024 to 31-08-2024.
- Mr. D. Vaduganathan, Assistant Professor, attended a two-week FDP on “Embark on a Hands-on Journey into Artificial Intelligence Mastery” organized by AICTE



- Mr. D. Vaduganathan, Assistant Professor, attended an online FDP on “Current Trends in IT Industry” organized by Sri Venkateswara College of Engineering, Sriperumbudur, from 21-10-2024 to 25-10-2024.



- Ms. S. Jayanthi, Assistant Professor, participated in the Fourth International Conference on “Modern Computing Trends and Technology” (ICMCTT – IV 2024) organized by Kristu Jyoti College of Management and Technology, Kerala, on 28-11-2024 and 29-11-2024.
- Mr. R. Parthiban, Assistant Professor, attended a three-day FDP on “RDBMS using PostgreSQL” organized by the National Institute of Technical Teachers Training and Research, Chennai, from 08-07-2024 to 10-07-2024.
- Mr. R. Parthiban, Assistant Professor, attended a one-week FDP on “MEAN Stack” organized by the National Institute of Technical Teachers Training and Research, Chennai, from 05-08-2024 to 09-08-2024.



- Mr. R. Parthiban, Assistant Professor, attended an online FDP on “Current Trends in IT Industry” organized by Sri Venkateswara College of Engineering, Sriperumbudur, from 21-10-2024 to 25-10-2024.

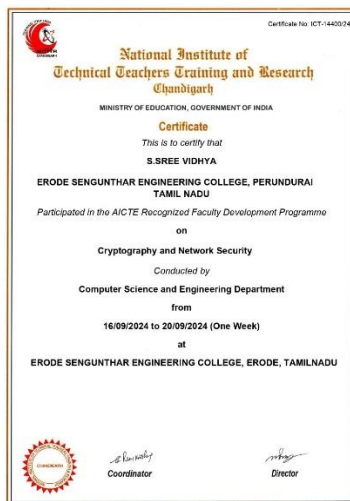


- Mr. R. Parthiban, Assistant Professor, attended a one-week FDP on “Tools for Research in Cloud, Fog and Edge Computing” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 21-10-2024 to 25-10-2024.

- Ms. S. SreeVidhya, Assistant Professor, attended a one-week FDP on “Social Network Analysis” organized by the National Institute of Technical Teachers Training and Research, Chennai, from 10-06-2024 to 14-06-2024.



- Ms. S. SreeVidhya, Assistant Professor, attended a one-week FDP on “Cryptography and Network Security” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 16-09-2024 to 20-09-2024.



- Ms. S. SreeVidhya, Assistant Professor, participated in the International Conference on “Integrating Social Work, Science, Engineering and Management” (ICSWSEM 2024) organized by Nehru Arts and Science College, Coimbatore, on 25-10-2024 and 26-10-2024.
- Ms. S. SreeVidhya, Assistant Professor, attended a two-week FDP on “Embark on a Hands-on Journey into Artificial

Intelligence Mastery” organized by AICTE ATAL, New Delhi, from 02-09-2024 to 14-09-2024.

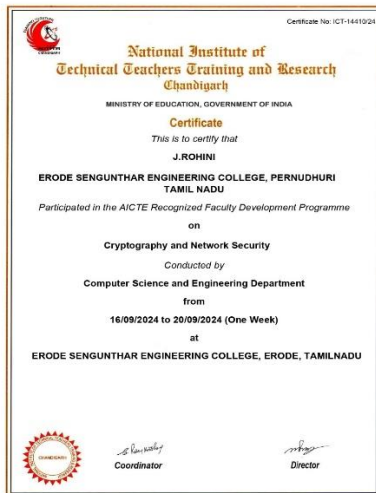
- Ms. S. SreeVidhya, Assistant Professor, attended a one-week FDP on “Open Source Applications in Engineering Education” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 18-11-2024 to 22-11-2024.
- Ms. S. SreeVidhya, Assistant Professor, attended a one-week FDP on “AI Applications and Practical Insights” organized by PSG Institute of Technology and Applied Research, Coimbatore, from 25-11-2024 to 29-11-2024.
- Ms. J. Rohini, Assistant Professor, attended a 1-week FDP on “Social Network Analysis” organized by National Institute of Technical Teachers Training and Research, Chennai, from 10-06-2024 to 14-06-2024.



- Ms. J. Rohini, Assistant Professor, attended a 5-day FDP on “Mathematical Approach to Artificial Intelligence and Machine Learning Algorithms” organized by PSG Institute of Technology and Applied Research, Coimbatore, from 23-07-2025 to 27-07-2025.



- Ms. J. Rohini, Assistant Professor, participated in a 1-week FDP on “Cryptography and Network Security” conducted by National Institute of Technical Teachers Training and Research, Chandigarh, from 16-09-2024 to 20-09-2024.



- Ms. J. Rohini, Assistant Professor, successfully completed a 2-week FDP on “Embark on a Hands-on Journey into Artificial Intelligence Mastery” organized by AICTE ATAL, New Delhi, from 02-09-2024 to 14-09-2024.
- Ms. J. Rohini, Assistant Professor, presented her work at the International Remote Conference on SmartIoT 2024, organized by NIT Puducherry, Karaikal, held on 11-11-2024 and 12-11-2024.
- Ms. J. Rohini, Assistant Professor, participated in a 1-week FDP on “AI Applications and Practical Insights” organized by PSG Institute of Technology and Applied Research, Coimbatore, from 25-11-2024 to 29-11-2024.
- Ms. M. Amshavalli, Assistant Professor, attended a 1-week FDP on “Social Network Analysis” organized by National Institute of Technical Teachers Training and

Research, Chennai, from 10-06-2024 to 14-06-2024.



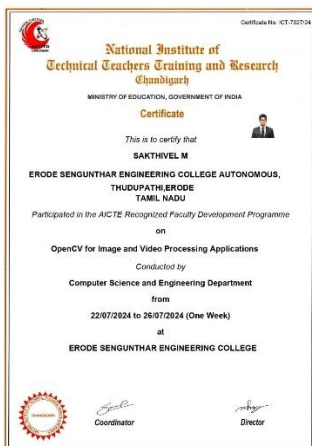
- Ms. M. Amshavalli, Assistant Professor, attended a 5-day FDP on “Mathematical Approach to Artificial Intelligence and Machine Learning Algorithms” organized by PSG Institute of Technology and Applied Research, Coimbatore, from 23-07-2025 to 27-07-2025.
- Ms. M. Amshavalli, Assistant Professor, participated in a 1-week FDP on “Cryptography and Network Security” conducted by National Institute of Technical Teachers Training and Research, Chandigarh, from 16-09-2024 to 20-09-2024.
- Ms. M. Amshavalli, Assistant Professor, successfully completed a 2-week FDP on “Embark on a Hands-on Journey into Artificial Intelligence Mastery” organized by AICTE ATAL, New Delhi, from 02-09-2024 to 14-09-2024.
- Ms. M. Amshavalli, Assistant Professor, participated in a 1-week FDP on “AI Applications and Practical Insights” organized by PSG Institute of Technology and Applied Research, Coimbatore, from 25-11-2024 to 29-11-2024.
- Ms. M. Amshavalli, Assistant Professor, presented her work at the Fourth



International Conference on “Modern Computing Trends and Technology” (ICMCTT–IV 2024) organized by KristuJyoti College of Management and Technology, Kerala, held on 28-11-2024 and 29-11-2024.



- Mr. M. Sakthivel, Assistant Professor, attended a one-week FDP on “OpenCV for Image and Video Processing Applications” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 22-07-2024 to 26-07-2024.

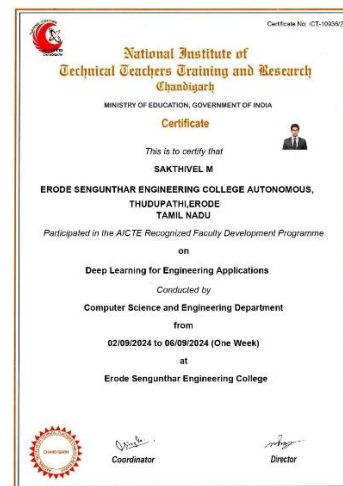


- Mr. M. Sakthivel, Assistant Professor, attended a one-week FDP on “MEAN Stack” organized by the National Institute of Technical Teachers Training and

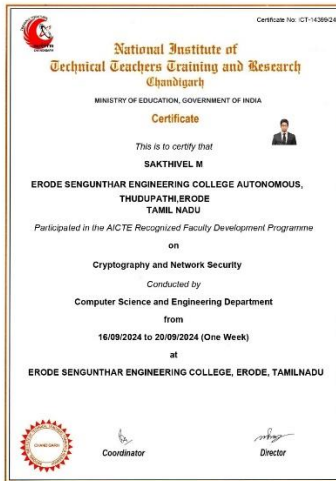
Research, Chennai, from 05-08-2024 to 09-08-2024.



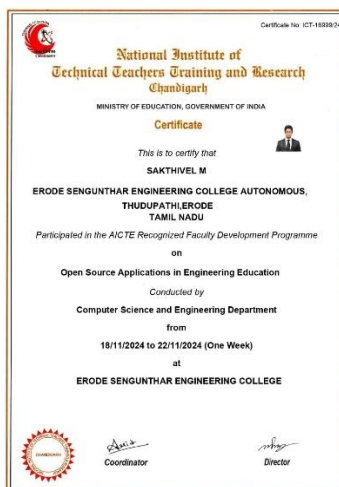
- Mr. M. Sakthivel, Assistant Professor, attended a one-week FDP on “Deep Learning for Engineering Applications” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 02-09-2024 to 06-09-2024.



- Mr. M. Sakthivel, Assistant Professor, attended a one-week FDP on “Cryptography and Network Security” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 16-09-2024 to 20-09-2024.



- Mr. M. Sakthivel, Assistant Professor, participated in the International E-Conference on “Emerging Trends in Education, Research and Innovation” organized by ACN College of Engineering & Management Studies, Aligarh, on 21-10-2024 and 22-10-2024.
- Mr. M. Sakthivel, Assistant Professor, attended a one-week FDP on “Open Source Applications in Engineering Education” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 18-11-2024 to 22-11-2024.



- Mr. M. Sakthivel, Assistant Professor, attended a one-week FDP on “Integrating AI, Supercomputing and Quantum Computing for Future Innovation” organized by ATAL – Sengunthar Engineering College, Namakkal, from 16-12-2024 to 21-12-2024.
- Mr. M. Sakthivel, Assistant Professor, participated in the International Conference on “Advances in Nanomaterial-Based Sensors: Impacting Environmental Pollution Detection through Artificial Intelligence” organized by Saveetha Engineering College, Chennai, on 19-12-2024 and 20-12-2024.
- Mr. K. Chidambaram, Assistant Professor, attended a two-week FDP on “Embark on a Hands-on Journey into Artificial Intelligence Mastery” organized by AICTE ATAL, New Delhi, from 02-09-2024 to 14-09-2024.
- Mr. K. Chidambaram, Assistant Professor, participated in the Fourth International Conference on “Modern Computing Trends and Technology” (ICMCTT – IV 2024) organized by KristuJyoti College of Management and Technology, Kerala, on 28-11-2024 and 29-11-2024.
- Mr. S. Ramakrishnan, Assistant Professor, attended a one-week FDP on “OpenCV for Image and Video Processing Applications” organized by the National Institute of Technical Teachers Training and Research, Chandigarh, from 22-07-2024 to 26-07-2024.
- Mr. S. Ramakrishnan, Assistant Professor, attended a one-week FDP on “Deep Learning for Engineering Applications” organized by the National Institute of Technical Teachers Training and Research,



Chandigarh, from 02-09-2024 to 06-09-2024.

- Mr. S. Ramakrishnan, Assistant Professor, participated in a Workshop on “AI in Industrial Automation” organized by Excel Engineering College, Namakkal, on 19-09-2024.
- Mr. S. Ramakrishnan, Assistant Professor, participated in a Workshop on “Digital Marketing Tools & Techniques” organized by Excel Engineering College, Namakkal, on 04-10-2024.
- Mr. S. Ramakrishnan, Assistant Professor, participated in a Seminar on “Quantum Computing and National Security: Implications for Defense Systems” organized by Kongu Engineering College, Erode, on 14-10-2024 and 15-10-2024.
- Mr. S. Ramakrishnan, Assistant Professor, participated in the International Conference on “Recent Advances in Computer Science and Information Technology” (ICRACSIT) organized by the World Research Forum for Engineers and Researchers, Thiruvananthapuram, on 14-11-2024.
- Mr. C. Prabakaran, Assistant Professor, attended a two-week FDP on “Embark on a Hands-on Journey into Artificial Intelligence Mastery” organized by AICTE ATAL, New Delhi, from 02-09-2024 to 14-09-2024.
- Mr. C. Prabakaran, Assistant Professor, participated in the Fourth International Conference on “Modern Computing Trends and Technology” (ICMCTT – IV 2024) organized by KristuJyoti College of Management and Technology, Kerala, on 28-11-2024 and 29-11-2024.

16. NPTEL COURSES DONE BY THE FACULTY

Faculty members of the department actively participated in various **NPTEL online certification courses** to enhance their technical knowledge and teaching expertise.

- Ms. T. Kalai Selvi successfully completed three courses — Data Structures and Algorithms using Java (12 weeks, July to October 2024) securing an Elite rank with 75 marks, Cloud Computing (12 weeks, July to October 2024) with an Elite rank of 65 marks, and Introduction to Industry 4.0 and Industrial Internet of Things (12 weeks, July to October 2024) achieving Elite status.

Elite
NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)

This certificate is awarded to
T KALAI SELVI
for successfully completing the course
Cloud Computing

with a consolidated score of **65** %

Online Assignments	25/25	Proctored Exam	40.16/75
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Total number of candidates certified in this course: **30816**

Jul-Oct 2024
(12 week course)

Indian Institute of Technology Kharagpur

Prof. Haimanti Banerji
Coordinator, NPTEL
IT Kharagpur

swayam

Roll No: NPTEL24CS118S251001437 To verify the certificate No. of credits recommended: 3 or 4

Elite
NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)

This certificate is awarded to
T KALAI SELVI
for successfully completing the course
Data Structure and Algorithms using Java

with a consolidated score of **75** %

Online Assignments	24.06/25	Proctored Exam	51/75
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Total number of candidates certified in this course: **5081**

Jul-Oct 2024
(12 week course)

Indian Institute of Technology Kharagpur

Prof. Haimanti Banerji
Coordinator, NPTEL
IT Kharagpur

swayam

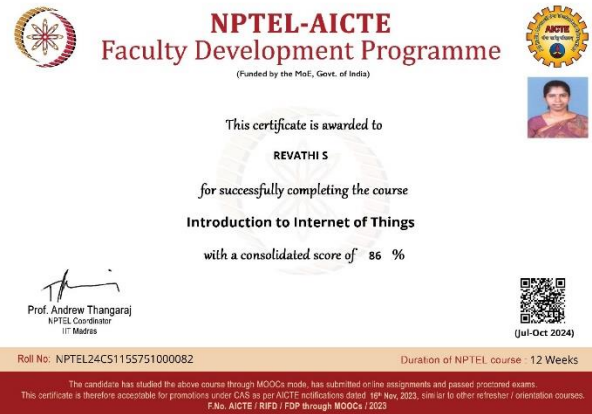
Roll No: NPTEL24CS96S451000408 To verify the certificate No. of credits recommended: 3 or 4

- Mr. M. Sakhivel completed the Introduction to Cyber Security course (12 weeks, July to October 2024) with a 56% pass score. Mr. E. Loganathan completed



Introduction to Machine Learning and Data Analytics with Python (July to October 2024) with a 48% pass in both courses.

- Ms. S. Revathi earned Elite status in the Compiler Design course (July to October 2024).
- Ms. R. Punitha Gowri completed Cloud Computing and Operating Systems Fundamentals in October 2024, securing Elite certification in both. Additionally, Ms. S. Revathi also completed Introduction to Internet of Things (July to October 2024) with an 86% score and Elite with Silver rank, and Operating Systems Fundamentals with a 56% score, demonstrating the faculty's continued commitment to upskilling and adopting new technologies in their teaching practices.
- Ms. T. Kalai Selvi, Assistant Professor, successfully completed a 12-week NPTEL Online Certification Course on "Data Structure and Algorithms using Java" with a score of 75% during Jul – Oct 2024.
- Ms. T. Kalai Selvi, Assistant Professor, successfully completed a 12-week NPTEL Online Certification Course on "Cloud Computing" with a score of 65% during Jul – Oct 2024.
- Ms. S. Revathi, Assistant Professor, successfully completed a 12-week NPTEL Online Certification Course on "Introduction to Internet of Things" with a score of 86% during Jul – Oct 2024.



NPTEL-AICTE
Faculty Development Programme
(Funded by the MoE, Govt. of India)

This certificate is awarded to
REVATHI S
for successfully completing the course
Introduction to Internet of Things
with a consolidated score of **86 %**

Prof. Andrew Thangaraj
NPTEL Coordinator
IT Madras

Roll No: NPTEL24CS1155751000082 Duration of NPTEL course: 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exam.
This certificate is therefore applicable for promotions and/or AICTE applications dated 1st Nov, 2023, till set to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2023

- Ms. S. Revathi, Assistant Professor, successfully completed a 12-week NPTEL Online Certification Course on "Operating System Fundamentals" with a score of 56% during Jul – Oct 2024.



NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)

This certificate is awarded to
REVATHI S
for successfully completing the course
Operating System Fundamentals
with a consolidated score of **56 %**

Online Assignments	23.38/25	Proctored Exam	33/75
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Total number of candidates certified in this course: 2487

Jul-Oct 2024
(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IT Kharagpur

Indian Institute of Technology Kharagpur

Roll No: NPTEL24CS1085651000335 To verify the certificate No. of credits recommended: 3 or 4

- Ms. R. Punitha Gowri, Assistant Professor, successfully completed a 12-week NPTEL Online Certification Course on "Operating System Fundamentals" with a score of 69% during Jul – Oct 2024.
- Ms. R. Punitha Gowri, Assistant Professor, successfully completed a 12-week NPTEL Online Certification Course on "Cloud Computing" with a score of 73% during Jul – Oct 2024.
- Mr. E. Loganathan, Assistant Professor, successfully completed a 12-week NPTEL Online Certification Course on



“Introduction to Machine Learning” with a score of 48% during Jul – Oct 2024.

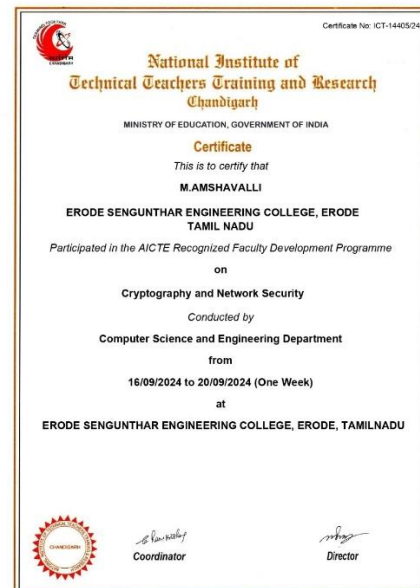


- Mr. D. Vaduganathan, Assistant Professor, successfully completed a 12-week NPTEL Online Certification Course on “Programming in Java” with a score of 57% during Jul – Oct 2024.



- Mr. M. Sakthivel, Assistant Professor, successfully completed an NPTEL Online Certification Course on “Cyber Security and Privacy” with a score of 53%, conducted for 12 weeks from July to October 2024.

- The faculty and their course assignments, all of which are 5 units, are as follows: *Kalai Selvi T* and *Gowrishankar U* both teach Cloud Computing.
- *Sakthivel M* is assigned Software Quality Assurance, *Loganathan E* teaches Advanced C and Python Programming, and *Parthiban R* handles Data Visualization Techniques.
- Additionally, *Amashavalli M* is teaching Compiler Design, *Punitha Gowri R* covers Design and Analysis of Algorithms, *Rohini J* is assigned Data Warehousing and Data Mining, and *Revathi S* teaches Cryptography and Network Security.



17. E CONTENT DEVELOPED DETAILS



Editorial Board:

Ms. M.Sakthivel AP/CSE

Mr. D.Vaduganathan AP/CSE

Mr. M.Mohan Ram, III CSE

Mr. D.Moulishwaraan, III CSE

Mr. S.Yeswanth, III CSE

Mr. P.Srikrishna, III CSE

Mr. K.Pradeep, III CSE