



JANSONS INSTITUTE OF TECHNOLOGY

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Technova - 3

July 2019 - Dec 2019

VISION

To produce skilled and competent engineering professional in the field of Electronics and Communication.



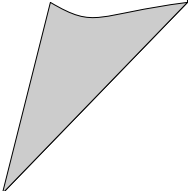
MISSION

Equip students with technical skills to meet current demands in the electronics industry Cultivate ethical and moral qualities to address societal needs.

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WORKSHOPS/CONFERENCES/FDP'S

- Faculty members from the ECE department have actively participated in **Faculty Development Programs (FDPs) and seminars** to enhance their knowledge in **embedded systems and Industry 4.0 applications**.
 - + **Mr. P. Gowtham and Mrs. P. Eswari** attended a **7-day FDP on "Automotive Embedded Systems"** at **PSG College of Technology** from **June 10, 2019, to June 16, 2019**. The program focused on advanced embedded technologies in the automotive industry, covering topics such as ECU design, sensor integration, and real-time processing.
 - + Additionally, **Mrs. P. Eswari** participated in a **2-day All India Seminar on "Role of Embedded Systems in Industry 4.0: The Fourth Industrial Revolution"** at **PSG College of Technology** from **August 30, 2019, to August 31, 2019**. The seminar provided insights into the impact of embedded systems on smart manufacturing, automation, and industrial IoT.
 - These programs have significantly contributed to faculty development, enabling them to integrate the latest technologies into academic and research activities.
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TECHNICAL SYMPOSIUM/ WORKSHOPS

- Faculty members from the ECE department have successfully organized **workshops and technical events**, fostering innovation and knowledge sharing among students and professionals from various institutions.
- + **Mr. G. Myilsamy** conducted a **two-day workshop on "Cloud-Based Machine Learning for IoT Devices"** from **September 30, 2019, to October 1, 2019**. The workshop focused on the integration of **machine learning with IoT** using cloud platforms, covering topics such as data analytics, predictive modeling, and real-time IoT applications. It attracted **82 participants from 10 different colleges**, providing them with hands-on experience in implementing machine learning algorithms for IoT-based solutions.
- + Additionally, **Mr. B. Vinothkumar** and **Mrs. N. Krishnapriya** successfully organized "**Avishkraanti-2K19**", a **technical symposium held on August 14, 2019**. This event featured multiple competitions, expert talks, and interactive sessions aimed at enhancing students' technical knowledge and problem-solving abilities. The symposium received an enthusiastic response, with **154 participants from 30 colleges** taking part in various activities that encouraged innovation and collaboration.
- These initiatives have played a crucial role in equipping students with **practical skills and industry-relevant knowledge**, bridging the gap between academics and real-world applications.

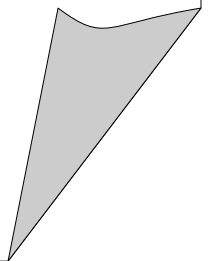
IN PLANT TRAINING

- ✚ Mr. S. Prakash has actively coordinated multiple **industrial training programs and internships**, enabling **III-year ECE students** to gain hands-on experience in various industries.
- ✓ **V. Prince Britley and K. Sathish** from **III ECE 'B'** completed industrial training at **Chip Crafts, Coimbatore**, from **July 10, 2019, to July 14, 2019**. This training provided insights into semiconductor design and embedded systems.
- ✓ A group of students, including **S. Deepana, R. Divya, M. Kalaivani, P. Mythizhi, and S. Madheshwari** from **III ECE 'A'**, along with **V. Poojashri and R. Sri Aishwarya** from **III ECE 'B'**, attended industrial training at **Durga Tech, Erode**, from **July 17, 2019, to July 21, 2019**. The program focused on real-time embedded systems and automation technologies.
- ✓ **D. Aravind, K. Boopathiraj, M. Lokesh, and M. Chandru** from **III ECE 'A'** participated in a **six-day industrial training at Bisect Technologies, Karumathampatti**, from **June 10, 2019, to June 15, 2019**, gaining knowledge in software and hardware integration.
- ✓ **KN. Bhuvaneshwari** from **III ECE 'A'** underwent **industrial training at TNPL (Tamil Nadu Newsprint and Papers Limited), Karur**, from **June 19, 2019, to June 25, 2019**, where she learned about automation in paper manufacturing and process control systems.
- ✓ **M. Sri Varshini and S. Revathi** from **III ECE 'B'** attended a **training program at ZenMicro, Coimbatore**, from **May 27, 2019, to June 7, 2019**, gaining exposure to embedded design and IoT-based applications.
- ✓ A team comprising **K. Shofiya Fahima and S. Priya** from **III ECE 'B'**, along with **S. Keerthana, M. Muhammed Javith, S. Kavishree, and E. Lavanya** from **III ECE 'A'**, completed **training at Manfree Technologies, Coimbatore**, from **June 10, 2019, to June 14, 2019**, focusing on hardware and software development for automation.
- ✓ **V. Aswin Shankar** from **III ECE 'A'** attended **BSNL Virudhunagar's industrial training** from **June 17, 2019, to June 21, 2019**, where he learned about **telecommunication networks and mobile communication technologies**.
- ✓ Finally, **S. Kiruthika and J. Jeya Sheeba** from **III ECE 'A'** participated in a **training program at J.J. Technologies, Coimbatore**, from **June 10, 2019, to June 15, 2019**, focusing on **VLSI design and embedded system applications**.
- ✚ These industrial training programs have provided students with **real-world exposure to embedded systems, automation, telecommunication, and software development**, bridging the gap between **academics and industry requirements**.

INTERNSHIPS

- ✚ Students from the ECE department have actively participated in **industrial training programs and internships** at various organizations, gaining practical exposure to emerging technologies.
- ✓ **Pavithra M., Shalini S.R., and Sabitha S.,** from **III ECE-B,** completed **industrial training at Appin Technology, Coimbatore,** from **November 24, 2019, to November 30, 2019,** focusing on embedded systems and software development.
- ✓ A group of **IV-year students,** including **Magesh Kumar T.K, Melvin Solomon R, Mithran B, Nares Kanna S.M, and Ranjith P,** underwent **internship training at Appkee Solutions, Coimbatore,** from **December 10, 2019, to January 11, 2020,** where they explored real-time software solutions and IoT applications.
- ✓ Another batch, comprising **Srivarshini M (III ECE-B), Divya R, Jagan G Mohan, Kavishree S, Keerthana S, Mohammed Rashiq A, and Jayanthaa D (III ECE-A),** attended **training at Bisect Technologies, Karumathampatti,** from **November 25, 2019, to November 30, 2019,** learning about automation and system integration. **Jona Marceline D (II ECE)** also completed training at **Bisect Technologies** from **November 25, 2019, to November 29, 2019.**
- ✓ **Anu Priya M (IV ECE)** completed an internship at **Brinn Tech, Karumathampatti,** from **November 26, 2019, to January 13, 2020,** gaining knowledge in industrial automation. Similarly, **Priyadharsan M (IV ECE)** and **Naveena R (IV ECE)** attended training at **Brinn Tech** from **November 28, 2019, to December 31, 2019,** and **December 7, 2019, to December 27, 2019,** respectively.
- ✓ A group of **II-year students,** including **Gayathri Devi C, Kadhalish S, Lincy Kerthziyal S, Madhumitha M, Nivethitha D, Saran R, Senthur Velan E, and Sri Deepika G,** participated in **training at Brinn Tech** from **November 25, 2019, to November 29, 2019,** focusing on embedded system programming.
- ✓ **BSNL, Coimbatore,** hosted an **industrial training program** for **II-year students,** including **Gangalakshmi M, Geethalakshmi M, Janani T, Kiruthika M, Sarnitha K, Subadharani P, Vasunthara Devi R, Vishmiha V, and Rupavathy R,** from **November 25, 2019, to November**

- ✚ ECE department have actively engaged in **industrial training programs and internships**, gaining hands-on experience in various domains, including **software development, embedded systems, IoT, and automation**.
- ✓ **Priyadharshini R (III ECE-B)** attended an **industrial training program at Dhurka Tech, Coimbatore**, from **November 23, 2019, to November 29, 2019**, focusing on **embedded systems and automation**. Similarly, **Sasmitha S and Sindhu C (III ECE-B)** completed their **training at Durga Tech, Erode**, from **November 21, 2019, to November 26, 2019**, enhancing their skills in **software applications and embedded technology**.
- ✓ A team of **IV-year students, including Haresh G and Harsha H**, participated in a **long-term industrial training program at EG Technologies, Erode**, from **November 26, 2019, to January 13, 2020**, where they explored **software solutions and IoT applications**. Another batch, consisting of **Mana Vasagan K, Robert Samuel S, Saran S N, Suvedharan M, and Logesh S (IV ECE)**, underwent **training at EG Technologies** from **December 13, 2019, to January 4, 2020**, gaining knowledge in **real-time industrial automation and software engineering**.
- ✓ **Shalini E and Subhashini M (III ECE-B)** attended a **training program at Emexo, Bangalore**, from **November 24, 2019, to November 30, 2019**, where they learned about **software development and cloud-based solutions**.
- ✓ A large group of students from **III ECE**, including **Boorana Priya S, Deepika M T, Jeya Sheeba J, Kayathiri K M, Keerthana G, Kiruthika S, Anbukkarasi S P, Divya M, Anitha R, Nilanjana M, Poojashri V, Umapriya R, Sri Aishwarya, Revathi S, and Vedha Vikashini D**, attended an **internship at Gateway Software Solutions, Coimbatore**, from **November 20, 2019, to November 23, 2019**. This training focused on **web development, software testing, and mobile application development**.
- ✓ **Nithish P and Sai Sarvesh D.R (II ECE)** underwent **industrial training at Green Medicare, Coimbatore**, from **November 25, 2019, to November 29, 2019**, where they gained insights into **biomedical electronics and healthcare technology**.
- ✓ Finally, **Anusuyadevi M B (III ECE-A)** attended **training at J.J. Technologies, Coimbatore**, from **November 25, 2019, to November 30, 2019**, focusing on **hardware development and circuit design**.
- ✚ These training programs have provided students with **valuable industry exposure**, bridging the gap between **theoretical learning and real-world applications**, and equipping them with **essential technical skills** for their future careers.



INDUSTRIAL VISITS

- ✚ Students from the ECE department participated in **industrial visits to prestigious organizations**, gaining valuable insights into **space technology, electronics, and industrial automation**.
- ✓ A group of **26 IV-year ECE students**, accompanied by **Dr. P. Gowtham and Mrs. P. Eswari**, visited **ISRO, Trivandrum**, from **August 26, 2019, to August 28, 2019**. The visit provided an in-depth understanding of **satellite technology, space research, and communication systems**, enhancing students' knowledge of advanced aerospace technologies.
- ✓ Additionally, **52 III-year ECE students**, along with **Mr. G. Myilsamy, Dr. S. Saravanan, Mrs. P. Manothini, and Ms. M. Surya**, visited **KELTRON, Cochin**, from **August 19, 2019, to August 20, 2019**. They explored **electronics manufacturing, industrial automation, and embedded systems**, gaining exposure to real-time production processes and industry applications.
- ✓ Similarly, **22 II-year ECE students**, guided by **Mr. S. Prakash and Mrs. R. Hemalatha**, attended another **industrial visit to KELTRON, Cochin**, from **August 20, 2019, to August 21, 2019**. This visit introduced them to **basic electronic components, PCB design, and industrial electronics applications**.
- ✚ These industrial visits provided students with **hands-on exposure to cutting-edge technologies**, bridging the gap between academic learning and **real-world engineering practices**.

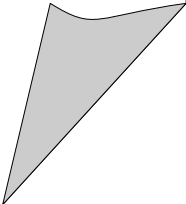
PAPER / PROJECT PRESENTATIONS

- ✦ Students from the ECE department actively participated in **paper presentations, international conferences, and technical seminars**, gaining exposure to the latest advancements in technology.
- ✓ **Bhuvaneshwari K.N (III ECE A)** presented a paper at **Empoweria 2K19**, a **paper presentation event held at Kongu Engineering College on August 8, 2019**, showcasing her research and technical skills.
- ✓ **Ravirajan A.B (IV ECE)** participated in the **International Conference on Software Defined Networking** at **College of Engineering, Guindy, Anna University, Chennai, on August 9-10, 2019**. This conference provided insights into **next-generation networking architectures and software-based communication systems**.
- ✓ Several students attended a **one-day seminar on "Communication Technologies and Security Challenges for IoT"** at **Hindusthan Institute of Technology on August 20, 2019**. **Jeyasheeba J, Kiruthika S, Anusuya Devi M.B, and Bhuvaneshwari K.N (III ECE A)**, along with **E. Shalini, C. Sindhu, Vivekanandhan G, and Uday Sriram C (III ECE B)**, participated in discussions on **IoT security threats and communication protocols**. Additionally, **Govindaraj A (II ECE)** also attended the seminar, gaining knowledge on **emerging trends in IoT security**.
- ✓ Another group of **IV-year students, including S. Keziah Clarin, B. Yuvashree, R. Sandhiya, J. Sithara, S. Sridevi, and P. Aishwarya**, attended a **CSIR-sponsored national-level seminar on "Deep Learning Techniques in Healthcare Applications"** at **Hindusthan Institute of Technology on August 28, 2019**. This seminar focused on the role of **AI and deep learning in medical diagnostics and healthcare innovations**.
- ✓ **Bhuvaneshwari K.N (III ECE A)** participated in the **Two-Day National Level Conference on "Application of Electronics and Instrumentation in the Betterment of Human Healthcare"** held at **Hindusthan Institute of Technology on August 2-3, 2019**.
- ✓ **Vishmiha V (II ECE)** participated in the **Youth Leadership Summit 2019**, organized by **ICT Academy at Sri Krishna College of Engineering and Technology, Coimbatore, on September 27, 2019**.

- ✓ **Yogakrishnan N.R.K and Vishnuprasath S.M (II ECE)** secured **First Place** in the **Paper Presentation** event **"IMAGE 2020"** held at **Knowledge Institute of Technology** on **January 30, 2020**, showcasing their research excellence.
- ✓ **Srivarshini M (III ECE B)** participated in the **All India Students Young Professional Women in Engineering Congress 2019** at **CMR Group of Institutions** from **September 28, 2019, to September 30, 2019**, engaging in discussions on **women's empowerment in engineering and technology**. She also attended the **Student Transition Elevation Partnership Program 2020** at **Sri Sairam Engineering College, Chennai**, on **January 4, 2020**, gaining insights into career advancement and industry expectations.
- ✓ A group of **III-year students**, including **M. Kalaivani, P. Mythizhi, S. Kavishree, S. Deepana, E. Lavanya, M. Chandru, V. Aswin Shankar, and M. Akash**, successfully completed the **Spoken Tutorial Python 3.4.3 Training** and passed the **online exam** conducted by the **QIC Cell, Jansons Institute of Technology**, on **August 10, 2019**.
- ✓ Similarly, **IV-year students**, including **M. Anupriya, Melvin Solomon, Manavasagan, Ramalingam, Sangavi, Aishwarya, Sandhiya, and Gomathi**, passed the **Spoken Tutorial Java Test** conducted on **August 7, 2019**. **II-year students**, including **D. Jona Marceline, T. Nithish, K. Sarnitha, R. Vasunthra Devi, and S.M. Vishnu Prasath**, also successfully completed the **Spoken Tutorial Java Test** on the same date.
- ✓ **Sarnitha K (II ECE)** participated in the **IoT Enigma - National Level Technical Symposium Yukta 2020**, held at **PSG Institute of Technology and Applied Research** on **February 5-6, 2020**, gaining hands-on experience in **IoT-based technologies**.
- ✓ **Arathi K Nair (II ECE)** took part in the **Technical Quiz Contest** conducted by **Sri Venkateshwara College of Engineering and Technology** on **July 31, 2019**, testing her knowledge in various technical domains.

✚ These achievements reflect the students' dedication to **academic excellence, research innovation**.

PUBLICATION BY THE FACULTY MEMBERS

- ✚ Faculty members from the ECE department have contributed to **innovative research and technological advancements** through publications in reputed **international journals**.
 - ✓ **Dr. G. Vetrichelvi**, HOD, published a research paper on "**Gas Level and Leakage Indicator for LPG Cylinder**" in the **International Journal for Scientific Research and Development**. This study focuses on **enhancing safety measures by detecting gas leaks in LPG cylinders** using sensor-based monitoring systems.
 - ✓ **Mr. B. Vinoth Kumar**, Assistant Professor, contributed his research on "**Pollution Monitoring in Vehicles using IoT**" in the **International Journal for Scientific Research & Development**. His work explores the **integration of IoT technology to monitor and control vehicular emissions in real time**.
 - ✓ **Mrs. P. Sivamani**, Assistant Professor, published a paper on "**Road Monitoring System for Accident Detection**" in the **International Journal of Innovative Research in Science, Engineering, and Technology**. This research aims to **enhance road safety by using smart sensors and AI-based accident detection systems**.
 - ✓ **Mr. V. VidhyaGowri**, Assistant Professor, presented research on "**Robot for Military Disaster Control System**" in the **International Journal of Innovative Research in Science, Engineering, and Technology**. This study focuses on **the development of robotic systems for military and disaster management operations**.
 - ✓ **Mr. S. Karthikeyan**, Assistant Professor, published a paper on "**Prepaid Energy Meter and Electricity Theft Detection Using GSM**" in the **International Journal of Engineering Research-Online**. His research emphasizes **the importance of smart energy meters for preventing electricity theft and improving energy management**.
 - ✚ These research contributions highlight the faculty's **commitment to innovation and their efforts to**
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VALUE ADDED PROGRAMS

- ✓ **II-year ECE students (2018-2022)** participated in an **Industry Relevant Course (IRC)** on **"Modeling, Simulation, and Implementation using MATLAB, Simulink & GUI"** at **Jansons Institute of Technology** during the even semester.
- ✓ **III-year ECE students (2017-2021)** participated in an **Industry Relevant Course (IRC)** on **"Machine Learning Using Python"** at **Jansons Institute of Technology** during the even semester. The course introduced students to **fundamental machine learning algorithms, data preprocessing, and model implementation using Python**, equipping them with essential skills for **AI and data-driven applications**.
- ✓ **IV-year ECE students (2016-2020)** attended an **IRC** on **"Design of Microwave Devices using High-Frequency Structure Simulator (HFSS)"** at **Jansons Institute of Technology** during the even semester. This course provided hands-on experience in **HFSS software for simulating and designing microwave components**, helping students understand **antenna design, RF circuits, and electromagnetic simulations for communication systems**.
- ✚ These courses have played a vital role in **enhancing students' technical competencies**, ensuring they stay **industry-ready and well-prepared for future advancements** in the field of **electronics and communication engineering**.

PROGRAM OUTCOMES

- ✓ Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering.
- ✓ Problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- ✓ Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- ✓ Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- ✓ Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- ✓ The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- ✓ Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- ✓ Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ✓ Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- ✓ Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- ✓ Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team.