JANSONS INSTITUTE OF TECHNOLOGY

Approved by AICTE | Affiliated to Anna University

Accrediated by NAAC with Grade "A"

An ISO 9001:2019 Certified Institution

TECHNOVA - 1
July 2018 - Dec 2018

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.

TABLE OF CONTENTS

- Several faculty members have actively participated in workshops and training programs to enhance their knowledge and expertise in emerging technologies.

  ✓ Mrs. V. VidhyaGowri attended a **three-day workshop on IoT for Healthcare** at **PSG College of Technology** from **June 28, 2018, to June 30, 2018**. The workshop focused on the integration of Internet of Things (IoT) technologies in healthcare applications, covering topics such as remote patient monitoring, smart medical devices, and data-driven healthcare solutions.

  ✓ Mr. K. Saravanan and Mrs. Krishnapriya participated in **SEASON '18**, a **three-day training program** conducted at **Kongu Engineering College, Perundurai, from August 16, 2018, to August 18, 2018**. This event provided valuable insights into cutting-edge developments in science, engineering, and technology. It served as a platform for researchers and academicians to exchange knowledge and explore innovative solutions in various engineering domains.

- These training programs have contributed significantly to the participants' professional development, enabling them to incorporate advanced technologies into their teaching and research activities.

- ✓ Mr. G. Myilsamy has actively contributed to the academic and technical development of students by organizing and participating in workshops

- ✓ He conducted a **two-day workshop on "3D Printing on Real-Time Applications"** at **Jansons Institute of Technology** on **August 9-10, 2018**, for **second- and third-year students**. This workshop provided hands-on experience in 3D printing technology, covering design principles, materials, and real-world applications in various industries such as healthcare, manufacturing, and automation.

- ✓ Additionally, he organized a **guest lecture on "Embedded Systems and IoT"** at **Jansons Institute of Technology** on **December 22, 2018**, exclusively for **second-year students**. The session was delivered by **Dr. Sivaraj, Professor/ECE, PSG College of Technology**, who shared insights into the fundamentals of embedded systems, IoT integration, and their role in modern technological advancements.

- These initiatives have greatly benefited students by enhancing their technical knowledge and practical skills in emerging fields of engineering.

- Mr. S. Prakash has actively coordinated several industrial training programs and internships for second-year ECE students, where they gain beneficial hands-on experience in various industries.

  ✓ **Pavithra G.** completed industrial training at **SK TEMS, Coimbatore**, during **November 28, 2018, to December 1, 2018**. The program aimed at strengthening technical knowledge in embedded systems and industrial automation.

  ✓ A team of students, comprising **Nilanjana M., Shofiya Fahima K., Priya S., Akash M., and Murali Vankata Jhlapathy J.,** underwent an **industrial training program at Wizaard Systems, Coimbatore**, during the period from **November 25, 2018, to November 30, 2018**. The training focused on sophisticated embedded system design and IoT applications.

  ✓ **Sri Varshini M.** underwent **industrial training at INTECH Calibration Pvt. Ltd., Pondicherry**, between **November 26, 2018, and November 30, 2018**. The training gave exposure to calibration methods and precision measurement technologies.

  ✓ **Shalini E.** participated in a training program at **Shri Ramm Inc, Tirupur**, between **November 26, 2018, and November 30, 2018**. The program was on industrial automation and control systems.

  ✓ The other team, comprising **Pavithra M., Sabitha S., Shalini S. R., and Subashini M.,** received **industrial training at Litz Tech, Coimbatore** between **November 23, 2018, and December 2, 2018**. The training included software development, embedded system design, and real-time applications.

  ✓ **K. Sathish and U. Prince Britly** underwent a month-long **industrial training at Manfree, Coimbatore**, from **November 26, 2018, to December 27, 2018**. This training gave intensive exposure to hardware and software integration in industrial uses.

  ✓ Lastly, **Muhammed Javith M., Mohammed Rashik A., and Bhuvaneshwaran** underwent **industrial training at TNPL, Kagithapuram** from **November 28, 2018, to December 4, 2018**. The training exposed them to the process of paper manufacturing, industrial automation, and quality control procedures.

- These industry associations have greatly helped the students' technical expertise and practical exposure, filling the gap between theoretical learning and practical applications.

- Students from the ECE department have actively participated in various international workshops, leadership summits, and competitive programming events, enhancing their technical and leadership skills.

  ✓ **Keziah Clarin S.** and **Ravirajan A. B.**, both from **III ECE**, attended the **International Workshop on Internet of Things (IWIOT'18)** organized by **Trainotech at PSG iTech** on **August 18, 2018**. The workshop provided insights into IoT applications, networking protocols, and real-time implementation techniques, offering a valuable learning experience in the field of emerging technologies.

  ✓ **Jagan G. Mohan** and **Kavishree**, from **II ECE**, participated in the **Youth Leadership Summit 2018** held at **Sri Krishna College of Engineering and Technology** on **October 12, 2018**. The summit aimed at fostering leadership qualities, teamwork, and innovation among young minds through interactive sessions and expert discussions.

  ✓ In addition, several students actively engaged in the **IEEE Xtreme Programming Competition**, a globally recognized coding contest. **Suvedharan M.**, from **III ECE**, competed in this **online event held on October 20, 2018**, demonstrating his problem-solving and programming skills.

  ✓ Similarly, a team comprising **Sri Varashini M., Shofiya Fahima, Nilanjana M., and Priya S.,** from **II ECE**, also participated in the **IEEE Xtreme Programming Competition** on **October 20, 2018**, showcasing their coding proficiency and ability to work under pressure in a competitive environment.

- These participations have provided students with valuable exposure to real-world challenges, enabling them to enhance their technical and leadership capabilities beyond classroom learning.

- Students from the ECE department have showcased their athletic excellence by securing notable positions in the **Anna University Zonal Tournament 2018-19**, demonstrating their dedication to both academics and sports.

  ✓ **Saranya V.,** from **IV ECE,** participated in the **Anna University Zonal Tournament** held at **RVS College of Engineering** and secured the **Runners-up position**. Her outstanding performance reflected her commitment to sportsmanship and teamwork.

  ✓ **Saravanan M.,** from **IV ECE,** competed in the **Anna University Zonal Tournament** at **Dr. NGP Institute of Technology** and secured **Third Place**. His remarkable efforts and determination contributed to his success in the tournament.

  ✓ Similarly, **Mythizhi P.,** from **II ECE,** participated in the **Anna University Zonal Tournament** at **RVS College of Engineering** and secured the **Runners-up position**. Her dedication and competitive spirit played a vital role in achieving this success.

- These achievements highlight the students' enthusiasm for sports and their ability to balance both academic and extracurricular pursuits, bringing pride to their institution.

OTHER
ACHIEVEMENTS

PUBLICATION BY THE FACULTY MEMBERS

- Faculty members from the ECE department have actively contributed to research through conferences and journal publications.

  ✓ **Mr. S. Prakash** presented **"Centralized Control Station"** at the **3rd International Conference on Advances in Science, Engineering, and Management 2K19** at **Jai Shri Ram College of Engineering**.

  ✓ **Ms. P. Manothini** presented **"Indoor Tracking and Monitoring Using RSSI Protocol"** at the **Eighth National Conference on Emerging Trends in Computer Communication and Informatics** at **Tamilnadu College of Engineering**.

  ✓ **Mr. S. Karthikeyan** presented **"Comparative Design Analysis of Full Adder Logic"** at the **same national conference**.

  ✓ **Mr. B. Vinoth Kumar** published **"Smart City Navigation System and V2V Communication Using Li-Fi Technology"** in the **International Journal of Engineering and Science Invention**.

  ✓ **Ms. V. VidhyaGowri** presented **"Diabetic Retinopathy Using ANN"** at the **3rd International Conference on Advances in Science, Engineering, and Management** at **Jai Shri Ram College of Engineering**.

  ✓ **Ms. P. Eswari** presented **"IoT-Based Automated Enhancement and Detection of Defects in Knitting Machines"** at the **Eighth National Conference on Emerging Trends in Computer Communication and Informatics**.

- These research contributions reflect the faculty's commitment to **technological innovation and academic excellence**, providing valuable insights into real-world applications of **IoT, AI, Li-Fi, and digital systems**.

VALUE ADDED PROGRAMS

- Students from various years actively participated in **Industry Relevant Courses (IRC)** conducted at **Jansons Institute of Technology**, enhancing their technical skills in **Arduino programming, robotics, and antenna design**.

  ✓ **II-year students (2017-2021)** attended an **IRC on "Basics of Arduino Programming,"** where they gained foundational knowledge of Arduino, its interfacing, and real-time applications.

  ✓ **III-year students (2016-2020)** participated in an **IRC on "Applications of Robotics using Arduino,"** exploring robotic system design, motor control, and sensor integration using Arduino.

  ✓ **IV-year students (2015-2019)** attended an **IRC on "Design of Antenna Structures using High-Frequency Structure Simulator (HFSS),"** focusing on antenna modeling, simulation techniques, and performance analysis using HFSS software.

- These training sessions provided students with hands-on experience, bridging the gap between theoretical concepts and real-world applications.

- ✓ 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, to manage projects and in multidisciplinary environments.