

Vision

- To become a reputed learning center producing competent professionals.

Mission

- DM1:** Provide Quality education through interactive teaching-learning practices.
- DM2:** Establish Technology-enabled environment for building core competencies including robotics.
- DM3:** Arrange Industry-Interaction to hone professional skills.
- DM4:** Organize activities to foster social skills and ethical values.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- PEO1:** Apply Engineering concepts to solve Electronics and Communication Engineering problems of social relevance.
- PEO2:** Design and develop Electronic devices and Systems for Industry or pursue research.
- PEO3:** Demonstrate competencies through continuous learning and adapt to multi-disciplinary environment.
- PEO4:** Practice professional values and contribute to the societal needs.

PROGRAM SPECIFIC OUTCOMES (PSOs)

- PSO1: Professional Skills:** Apply principles of Analog and Digital Electronics, Communication Systems, Image processing, VLSI and Embedded Systems to solve diverse problems.
- PSO2: Software Knowledge:** Develop solutions for complex engineering problems of social relevance by employing Xilinx, CC Studio, Micro Wind, Keil, NG Spice, Scilab tools.



GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY
(Approved by AICTE, New Delhi & Affiliated to JNTU, Anantapur)

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

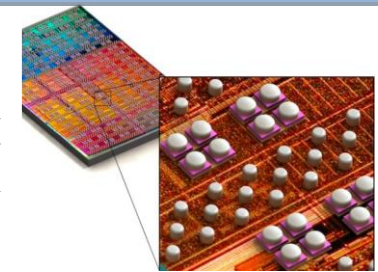
NEWS LETTER

ABSOLUTE ELECTRONICS

“Key to Success”

Thermal Copper Pillar Bump

The thermal copper pillar bump is a micro-size thermoelectric device used for the packaging of electronics and optoelectronics, such as laser diodes, semiconductor optical amplifiers, CPU, and GPU.



Nextreme Thermal Solutions developed this technology in order to integrate active thermal management functionality at the chip level. The method is now used by tech giants, including Intel and Amkor, to connect microprocessors and other advanced chips to various surfaces.

When current passes through a circuit board, the thermal bump pulls the heat and transfers it to the other bump. This process is known as Peltier effect, and this is how a thermal bump helps in reducing heat from electronic circuits.

Editorial Board:

Faculty Editors:

- M. Sivakrishna, Asst. Professor
C.DurgaTejaswi, Asst. Professor

Student Members:

1. D.Yashwanth (III ECE)
2. Sk.Muthahar(III ECE)
3. P.Charan Kumar (II ECE)
4. K. Sri Varshini (II ECE)

Faculty Contributions -Publications/Workshop/Industrial Visit / Achievements:

1. Dr. K. Radhika invited as a resource person for AICTE Sponsored Two Wee Online FDP on Machine Learning and Deep Learning – An Application Perspective Machine learning algorithms and ML for change detection in multispectral satellite images dated 10.12.2020 by Sreenivasa Institute of Technology and Management Studies (SITAMS), Chittoor.
2. Dr. P. Rahul Reddy Attended a FDP on Data Science using Python Organized by Shri Vishnu Engineering College for Women, Bhimavaram Online From 23.11.2020 to 05.12.2020 , Two-Week.
3. Dr. Shaik Mahaboob Basha, Mr. P. Raghava Reddy, Dr. Syed Jeelan Basha, Dr. D. Regan, Dr. P. Rahul Reddy, Dr. A. Kishore Reddy acted as a coordinators for FDP on “Python for Image Processing and IoT” from 23.11.2020 to 28.11.2020, NIT professors and Industry persons have addressed the FDP and 87 faculty members have participated from various locations.
4. Mr. G. Suresh Attended a FDP on Python for Image Processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Nellore/ Online From 23.11.2020 to 28.11.2020, One-Week.
5. Mr. K. Chandrasekar Attended a FDP on Python for Image processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week.
6. Dr. A. Kishore Reddy Attended a FDP on Python for Image processing and IoT Organized by Geethanjali Institute of Science and Technology Online From 23.11.2020 to 28.11.2020, One-Week
7. Mr. P. V. Krishna Rao Attended a FDP on Python for Image processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week.
8. Mr. T. Suneel Kumar Attended a FDP on Python for Image Processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week.
9. Mr. D. V. Sai Kishore Attended a FDP on Python for Image Processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week
10. Mr. S. Sreenivasulu Attended a FDP on Python for Image Processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week.
11. Mr. U. Penchalaiah Attended a FDP on Python for Image Processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week.
12. Mr. M. Sivakrishna Attended a FDP on Python for Image Processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week
13. Ms. M. Suhasini Attended a FDP on Python for Image Processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week.
14. Mr. MNLN Singh Attended a FDP on Python for Image Processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week
15. Dr. D. Regan Attended a FDP on Python for Image Processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week.
16. Mr. G. Kiran Kumar Attended a FDP on Python for Image Processing and IoT Organized by Geethanjali Institute of Science & Technology, Nellore Online From 23.11.2020 to 28.11.2020, One-Week.
17. Dr. P. Rahul Reddy Attended a FDP on Design Approaches in Analog and Digital VLSI Organized by Sasi Institute Technology and Engineering, Tadepalligudem Online From 16.11.2020 to 21.11.2020, One-Week .
18. Dr. K. Radhika associate professor in ECE department Received Ph.D from JNTUK dated 17.11.2020 on Classification of multispectral satellite images using ensemble subspace discriminant technique for change detection applications.
19. Dr. Syed Jeelan Basha Published a patent A remote controlled solar weed removal machine In the area IoT Published on 13.11.2020
20. Dr. P. Rahul Reddy Attended a FDP on System on Chip Design-Basics to Development of Chips Organized by MVSR Engineering College, Hyderabad Online

From 01.11.2020 to 12.11.2020, Two-Week

21. Mr. G. Kiran Kumar Attended a FDP on Applications of Signal, Image and Video processing in VLSI using Xilinx system generator (Phase-III) Organized by Narayana Engineering College, Hyderabad Online From 02.11.2020 to 07.11.2020, One-Week
22. Dr. P. Rahul Reddy Participated in workshop Modern electronics and e-communication Organized by GMR Institute of Technology, Rajam In Online from 27.10.2020 to 31.10.2020, 5-Days.
23. Mr. G. Kiran Kumar Attended a FDP on Applications of Signal, Image and Video processing in VLSI using Xilinx system generator (Phase-II) Organized by Narayana Engineering College, Hyderabad Online From 07.10.2020 to 12.10.2020, One-Week
24. Dr. A. Kishore Reddy Published a patent Design and development of artificial intelligence based architecture of Smart grid integrated with wireless communication networks In the area Wireless Communication Published on 02.10.2020.

Student Achievements:

Prizes Won/PPT/Poster/Workshop/Online Courses:

- 182U1A04A9 Palukuru Venkata Sai Kumar Reddy Participated in Online Certification Courses on Drone Technology Organized by Apsdc on 10/5/2020.
- 182U1A0419 Bodipudi Priyanka Participated in Student Workshops on Fundamentals Of Drone Technology Organized by Apsdc on 10/5/2020.
- 182U1A0404 Amara Lakshmi Sravani Participated in Student Workshops on Drone Technology Organized by Apsdc on 10/5/2020.
- 182U1A0421 Bonigi Joshna Participated in Student Workshops on Fundamentals Of Drone Technology Organized by Apsdc on 10/5/2020.
- 182U1A0431 Chinni Pushpa Latha Participated in Student Workshops on Fundamentals Of Drone Technology Organized by Apsdc on 10/5/2020.
- 182U1A0444 Gandavarapu Srividya Participated in Student Workshops on Fundamentals Of Drone Technology Organized by Apsdc on 10/5/2020.
- 182U1A0420 Bollineni. Lakshmi Madhuri Participated in Student Workshops on Fundamentals Of Drone Technology Organized by Apsdc on 10/5/2020.

- 182U1A0474 Kondapalli Bharadwaj Participated in Student Workshops on Fundamentals Of Drones Technology Organized by Apsdc on 10/5/2020.
- 182U1A0486 Meesala. Devipriya Participated in Student Workshops on Fundamentals On Drone Technology Organized by Andhra Pradesh State Skill Development Corporation on 10/5/2020.
- 182U1A0468 Katta Vivek Participated in Student Workshops on Fundamentals Of Drone Technology Organized by Apsdc on 10/5/2020.
- 182U1A04B0 Pamujula Sudheer Babu Participated in Online Certification Courses on Fundamentals On Drone Technology Organized by Apsdc on 10/10/2020.
- 182U1A0471 Kodavala Akhila Participated in Student Workshops on Mathematical Operation With The Scilab Organized by Apsdc on 10/11/2020.
- 182U1A04B6 Pesala Supriya Participated in Student Workshops on Fundamental On Drone technology Organized by on 10/15/2020.
- 182U1A04B6 Pesala Supriya Participated in Others on Digital Electronics Organized by on 10/18/2020.
- 182U1A0458 Kaku Supriya Participated in Online Quiz on Computer Of Office Automation Organized by Arive Aatral on 11/5/2020.
- 192U1A0490 M.Mrudula Participated in Online Quiz on National Mathematics Day Organized by Gist on 12/22/2020.
- 192U1A0497 Nandigama Umadevi Participated in Online Quiz on National Mathematics Day Organized by GIST on 12/22/2020.
- 192U1A04C6 P.Naga Rishitha Participated in Online Quiz on National Mathematics Day Organized by Gist on 12/22/2020.
- 192U1A04C0 P.Vyshnavi Participated in Online Quiz on National Level E-Quiz On Aptitude Organized by Geethanjali Institute Of Science And Technology on 12/22/2020.
- 192U1A04B8 Pathipati Chandupriya Participated in Online Quiz on "National Level E-QUIZ On Aptitude-National Mathematic Organized by Geethanjali Institute of science and technology on 12/22/2020.

Events Organized

One week online workshop on “Drone Technology” at GIST

One week online workshop on “Drone Technology” was organized by the department of ECE, from 5th to 10th October 2020 in collaboration with APSSDC. The experts from APSSDC explained various concepts of Drone Technology related aspects right from the fundamentals for III year B.Tech ECE students.

The workshop started with a presentation on Drone Technology basics and its related fields where opportunities are abundant in the industry. The presentation clearly explained what skills are required to become a Drone Technology developer or engineer. The entire workshop was focus on designed a Drone Technology and it took totally six sessions.



Two week online workshop on “Embedded Systems “at GIST

Two week online workshop on “ Embedded Systems “was organized by the department of ECE, from 5th to 17th October 2020 in collaboration with APSSDC. The experts from APSSDC explained various concepts of Embedded System related aspects right from the fundamentals for II year B.Tech ECE students.

The workshop started with a presentation on Embedded Systems and its related fields where opportunities are abundant in the industry. The presentation clearly explained what skills are required to become an embedded designer or engineer.



Report on One week Online Training on “Cyber Security”

One week online workshop on “Cyber Security” was organized by the department of ECE, from 12th to 17th October 2020 in collaboration with APSSDC. The experts from APSSDC explained various concepts of Cyber Security related aspects right from the fundamentals for IV year B.Tech ECE students.

The workshop started with a presentation on Cyber Security basics and its related fields where opportunities are abundant in the industry. The presentation clearly explained what skills are required to become a Cyber Security Network engineer. The entire workshop was focus on Security algorithms and how apply it practical applications and it took totally six sessions.

The Principal of GIST, Prof. Dr. G.Subba Rao, in the inaugural address also mentioned the demand of cyber security in the related fields of Networking. Mr.P.Raghava Reddy, The head of the department of ECE (Admin), Dr.P.Chakrapani HOD,IICC, Mr.U.Penchalaiah, Assistant Professor took part in the workshop actively.