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"

Deep Learning in MATLAB

Deep learning is a branch of machine learning that teaches computers to do what comes naturally to humans: learn from experience. Machine learning algorithms use computational methods to "learn" information directly from data without relying on a predetermined equation as a model. Deep learning is especially suited for image recognition, which is important for solving problems such as facial recognition, motion detection, and many advanced driver assistance technologies such as autonomous driving, lane detection, pedestrian detection, and autonomous parking. Deep Learning Toolbox™ provides simple MATLAB® commands for creating and interconnecting the layers of a deep neural network. Examples and pretrained networks make it easy to use MATLAB for deep learning.

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

1. Dr. Sk. Mahaboob Basha Attended an FDP on Implementation of OBE and Online Teaching Organized by National Institute of Technical Teachers Training and Research (NITTTR), Chennai Online from14.09.2020 to 18.09.2020, One Week
2. Dr. Sk. Mahaboob Basha Attended an FDP on Advances in Medical Imaging Organized by IIT (BHU) – I-DAPT Hub Foundation Onlinefrom14.09.2020 to 18.09.2020, One Week
3. Dr. P. Rahul Reddy Attended an FDP on Internet of Things (IoT) based Green Energy Systems Organized by B V Raju Institute of Technology, Hyderabad onlinefrom14.09.2020 to 19.09.2020, One-Week
4. Dr. A. Kishore Reddy Attended an FDP on Advanced Wireless Communications and Networks Organized by Vigna' sNarula Institute of Technology and Science for Women, GunturOnlinefrom17.08.2020 to 22.08.2020, One-Week
5. Dr. Shaik Mahaboob Basha Published a patent Optimized convolution neural network (OCNN) for voice-based sign language recognition optimization and regularization in the area Neural Networks Published on 21.08.2020
6. Mr. G. Kiran Kumar Published a patent Optimized convolution neural network (OCNN) for voice-based sign language recognition optimization and regularization in the area Neural Networks Published on 21.08.2020
7. Dr. A. Kishore Reddy Attended an FDP on VLSI & Embedded Systems Design for Aerospace &Defense Applications Organized by Sri Venkateshwara Institute of Science & Technology, Kadapa Online from 10.08.2020 to 14.08.2020, 5-Days.
8. Dr. P. Rahul Reddy Attended an FDP on VLSI & Embedded Systems Design for Aerospace Defense Applications Organized by Sri Venkateshwara Institute of Science & Technology, Kadapa Online from 10.08.2020to14.08.2020, 5-Days.
9. Dr. Shaik Mahaboob Basha Published a patent Preventing vehicle accidents: intelligent accident avoidance Using satellite-based positioning system in the area Communication Published on 31.07.2020
10. Dr. P. Rahul Reddy Published a patent Smart Parking and Vehicle Name Plate Detection In the area Image Processing Published on 31.07.2020
11. Mr. K. Chandrasekar Attended an FDP on Technologies with Social Relevance Organized by GMR Institute of Technology, Rajam Online from 27.07.2020 to 01.08.2020 , One-Week
12. Dr. P. Rahul Reddy Attended an FDP on Nanotechnology and Functional Materials Organized by S V College of Engineering, Tirupati Online from 27.07.2020 to 01.08.2020, One-Week.
13. Mr. K. Chandrasekar Attended an FDP on Recent trends and Advancements in Computer Science by Eminent Academicians Organized by VJIT Online from 22.07.2020 to 28.07.2020, One-Week.
14. Dr. A. Kishore Reddy Attended an FDP on Recent trends and advancements in computer science by eminent academicians Organized by Vidya Jyothi institute of technology, Hyderabad Online from 22.07.2020 to 28.07.2020, One-Week.
15. Dr. K. Radhika Participated in conference Road ahead Computational Intelligence Research for Hyper spectral Image Classification Organized by Sreenivasan Institute of Technology and Management Studies(SITAMS) , Chittoor in Online from 24.08.2020
16. Dr. A. Kishore Reddy Attended an FDP on Research trends in image processing with Machine learning and deep learning Organized by G.Pulla Reddy Engineering College (Autonomous): Kurnool Online from 21.07.2020 to 25.07.2020, 5-Days.
17. Dr. P. Rahul Reddy Attended an FDP on Research Trends in Image Processing with Machine Learning and Deep Learning Organized by G. Pulla Reddy Engineering CollegeOnlinefrom21.07.2020 to 25.07.2020, 5-Days
18. Dr. P. Rahul Reddy Attended an FDP on Embedded UVM Open-Source Emulation and Functional Verification Organized by Electronics and ICT Academy and Indian Institute of Technology Online from 13.07.2020 to 24.07.2020, Two-Week.
19. Dr. K. Radhika Participated in workshop Webinar on Cyber Security Organized by KMM Institute of Technology and Science, Tirupati in Online from20.07.2020

20. Mr. G. Suresh Attended an FDP on Recent Advances in Biomedical Applications and Communication Networks Organized by GMR Institute of Technology, Razam, AP Online from 13.07.2020 to 18.07.2020, One-Week.
21. Mr. K. Chandrasekar Attended an FDP on Recent Advances in Biomedical Applications and Communication Networks Organized by GMR Institute of Technology, Rajam Online from 13.07.2020 to 18.07.2020, One-Week.
22. Dr. K. Radhika Attended an FDP on Being a Super Teacher Organized by Bannari Amman Institute of Technology, Tamandu Online from 06.07.2021 To 12.07.2021, One-Week.
23. Dr. K. Radhika Attended an FDP on Challenges and Research Opportunities in the area of Communication & Signal Processing Organized by CMR Engineering College, HyderabadOnlinefrom20.07.2021 to 24.07.2021, 5-Days.

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

- 182U1A04H0 Valluru Sravanthi Participated in Online Quiz on Digital Electronics Organized by S.R. Institution Technology on7/1/2020.
- 182U1A04A3 Neelisetty Basava Meghana Participated in Online Quiz on Digital Electronics Organized by Department Of Electronics And Communication Engineering Of SRK Institute Of Technology, Vijayawadaon7/1/2020.
- 182U1A0467 Katavuri Chandrakala Participated in Online Quiz on Digital Electronics Organized by S.R. Institution Technology, Vijayawadaon7/1/2020.
- 182U1A04B5 Penubolu Siva Mala Participated in Online Quiz on Quiz On "DIGITAL ELECTRONICS" Organized by S.R. K Institute Of Technology on 7/1/2020.
- 182U1A0471 Kodavala Akhila Participated in Online Quiz on Digital Electronics Organized by SRK Institute Of Science And Technology on7/1/2020.
- 182U1A04B0 Pamujula Sudheer Babu Participated in Online Quiz on Digital Electronics Organized by Electronics And Communication Engineering on 7/1/2020.
- 182U1A04G4 Talluri Saran Teja Participated in Online Quiz on Digital Electronics Organized by SRK Institute Of Technology on7/2/2020.
- 182U1A0468 Katavuri Chandrakala Participated in Webinar on Machine Learning Using Phyton Organized by Saveetha Engineering College on7/2/2020.
- 172U1A0443 Sv.Adithya Participated in Online Certification Courses on Microsoft Organized by Microsoft on7/3/2020.
- 172U1A0434 P.Likhitha Participated in Online Quiz on National Level Equiz On Python Programming Organized by Indian Servers on 7/3/2020.
- 172U1A0421 G.Sravya Participated in Online Quiz onTech-Intellence Organized By CHAITANYA (DeemedToBe University) on7/4/2020.
- 182U1A0467 Katavuri ChandrakalaP articipatedi n Online Quizon Quiz On COVID19 PANDEMIC GENERALA WARENESS Organized by Dsr College Of Education on 7/8/2020.
- 182U1A04H5 Yellamraju Siva Poojitha Participated in Student Workshops on Artificial Intelligence In Health Care Organized by Saveetha Engineering College on 7/9/2020.
- 182U1A04H0 ValluruSravanthi Participated in Student Workshops on Artificial Intelligence In Health Care Organized by Saveetha Engineering College on 7/9/2020.
- 182U1A04D1 Sellamuthu Aruna Participated in Student Workshops on Artificial Intelligence In Health care Organized by Saveetha Engineering College on 7/9/2020.
- 182U1A04A3 Neelisetty Basava Meghana Participated in Studen Workshops on Quiz On Electronics Organized by Department Of Electronics And Communication Engineering, Lenora College Of Engineering, Rampa chodavaram on 7/9/2020.
- 182U1A04F9 Syed Nayem Participated in Online Quizon Web Designing And Development Organized by Apponix Technologies on 7/11/2020.
- 202U5A0402 Gopisetty Nanditha Sree Participated in Online Certification Courses on E-Quiz Organized by Sri Padmavati Women's Polytechnic College on 7/11/2020.

Events Organized

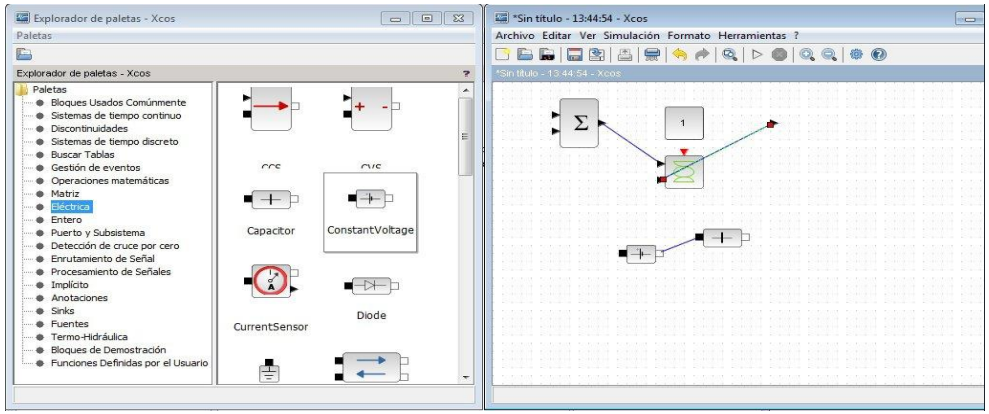
Online Training Program on "Sci Lab"

Online Training Program on "SciLab "was organized by the department of ECE, from 27th July to 8thAugust 2020in collaboration with APSSDC. The experts from APSSDC explained various concepts of Scilab related aspects right from the fundamentals for II year B. Tech ECE students. The workshop started with a presentation on Scilab and its related applications where it can be used.

The presentation clearly explained what skills are required to become a Scilab programmer. The entire workshop was Explain various modules like mathematical expressions and how to use all other practical labs.

The workshop participants were able to successfully code and run their programs and check the outputs of various modules. In detailed demonstrations were given on various applications. The workshop turned out to be a major successful event, imparting lot of knowledge about Sci lab and how to work with various modules. Andalso, students are developed some mini projects.

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



PROGRAM OUTCOMES (POs)

PO1. **Engineering Knowledge :** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2.**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.

PO3.**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.

PO4.**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.

PO5.**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.

PO6.**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.

PO7.**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.

PO8.**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10.**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.

PO11.**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.

PO12. **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.