Electronics and Communication Department

ME Communication Systems

Welcome for the Virtual Meeting

18.7.2020

Dr. Amutha

Program Coordinator

Agenda

- Introduction
- PG Programmes
- ME Communication systems
- Salient features of ME CS
- Curriculum
- Research Lab facilities
- Institute-Industry Internship
- Alumnus in Industry
- Alumnus in Higher Education
- Alumnus thought about ME CS

Introduction

- The Department of Electronics and Communication Engineering (ECE) was established in the year 1996 with the vision of developing the department as a Centre of Excellence in R&D

- The Department has been accredited by NBA (National Board of Accreditation) for a period of five years (2015-2020). It is also ISO 9001 certified.

- The department is well equipped with the state-of-art laboratories.

- The department has acquired projects from several national agencies such as DST, AICTE, NIOT, BRNS, ISRO, IGCAR, Tamil Nadu Forest Department, AICRP, etc. As on 2020, the department has successfully completed 21 projects worth Rs.3.63 crores and is currently executing 9 projects worth of Rs. 2.7 crores.

PG Programmes in ECE Dept

PG Programmes offered by the Department

M.E. in Communication Systems

M.E. in Applied Electronics

M.E. in VLSI Design

- The Department is a recognized research centre by Anna University to pursue MS (By Research) and Ph.D
- Department encourages the student internship programme and industrial projects.
- From our department, around 500 of PG alumnus are in different industries
- We have six month Research Assistant scheme with Rs 5000 as stipend to extend the final year project
- Students of the Department are trained in house with cutting-edge technologies through the Tech Club.

ME Communication Systems

- A two-year ME Communication systems program offered to provide a broad knowledge and practical experience in Communication Systems with advanced topics in Antenna, Signal processing, Wireless with six areas identified for Professional electives handled by experienced Ph.D. qualified faculty members.
- The program have an exclusive well equipped lab with state-of-the-art CST Studio Suite, MATLab and computing facilities that is available to student use during regular and beyond regular course schedule.
- Students have access to well equipped library with quality textbooks & reference books, and e-journals including IEEE, Elsevier, Springer, and others.
- The program allows students to complete their Master's thesis internally under the guidance of our faculty or externally through Industry experts with a strong emphasis on research and development

Salient features of ME CS

The ME CS programme started in the year 2003 at the Department of ECE.

- The programme is accredited by NBA for 5 years
- Special elective by faculty from aboard
- Internal funding to students by SSN trust for one year
- All faculty with PhD qualification
- Some of the major softwares used in the program are, MATLab, Intellisuite, COMSOL Multi-physics, HFSS, ADS & CST Studio Suite.

Curriculum

Credit Distribution for Communication Systems Program		
1	Fundamental Course	**04**
2	Professional Core Courses	**30**
3	Professional Elective courses	**19**
4	Employability Enhancement Courses	**20**
Total Program Credits		**73**

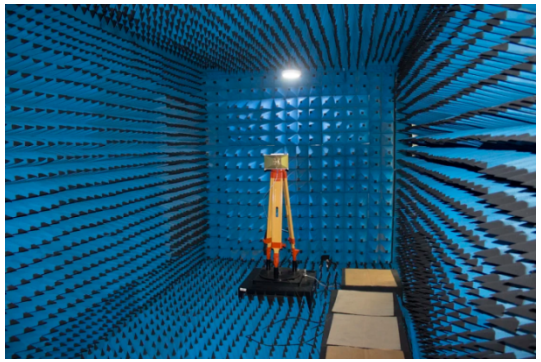
Research lab Facilities

State of the art research lab

- Antenna Measurement and testing Lab
- Underwater Lab
- MEMS Lab
- WSN and IoT Lab
- Fiber optics Lab
- PG Simulation Lab

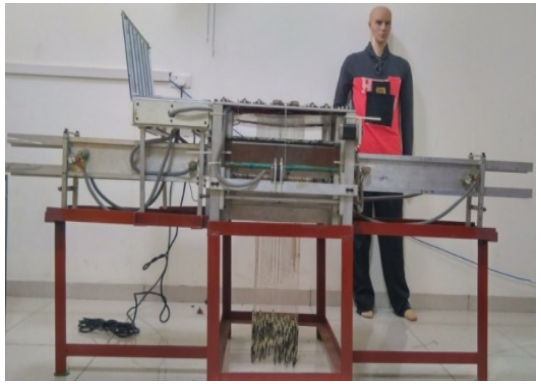
Research Labs

Underwater Acoustics



Radiation Pattern Measurement Facility

Material and MEMS



Textronics Design and Development

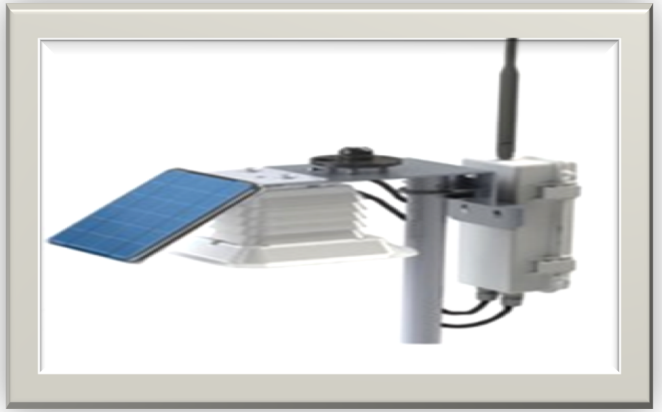
Internet of Things

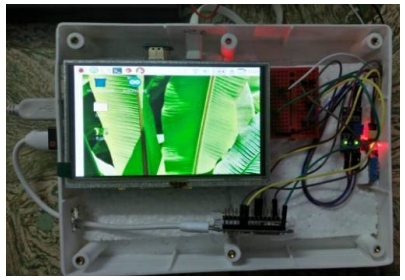
Academic Labs

Electronics Lab - I & II
MP & Embedded Systems Lab
LIC Lab
Communication Lab
Microwave & Optical & PG Lab I
DSP Lab
VLSI Lab
Research Projects Lab I
Low Power Systems & Computing Lab
PG Lab - II
Research Projects Lab II
Wireless Technologies Lab
Optical Research and Networks Lab

DST - SSTP	Collaborator - NRCB, Trichy
Budget Rs.62.26 L	Dr.S.Radha

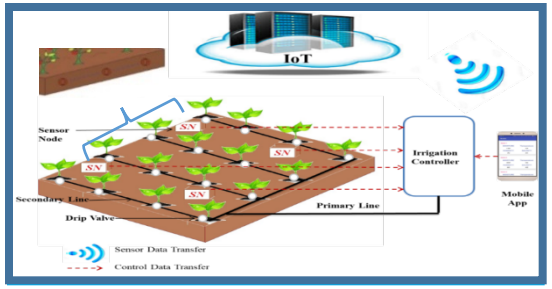
- To design an efficient and affordable IoT enabled plant disease and pest detection system
- To develop a user friendly system.
- To develop and deploy the prototype and validate its operation at rice bowl regions of Tamilnadu and foot hills of Palani for improving yield.

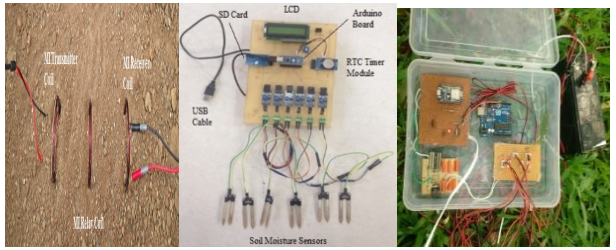


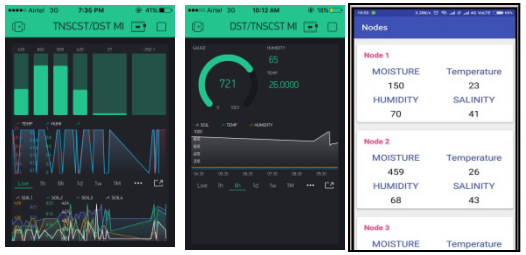


TNSCST Budget Rs.8.69 L	Dr.S.Sakthivel Murugan

- To sense, collect and analyze the sensor data for monitoring and display of the plant demand
- To control and automate irrigation using MI based WUSN System





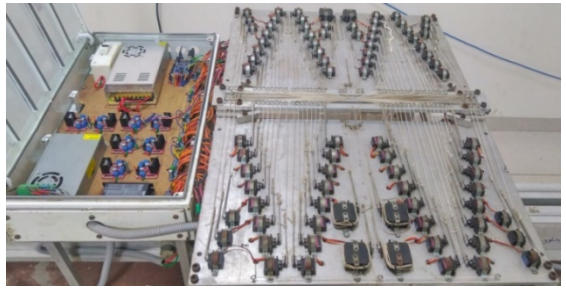


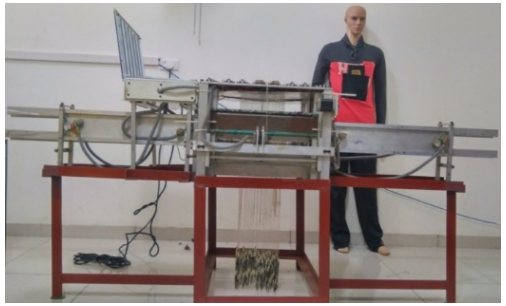
DST EMR

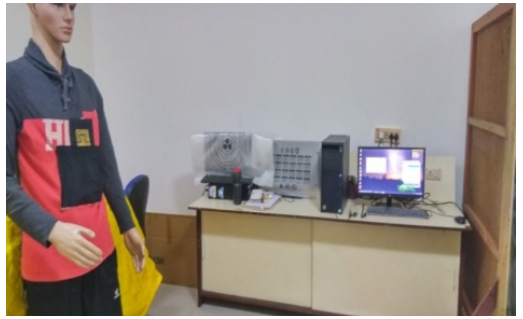
Budget Rs.30.96 L

Dr.S.Esther Florence

- To develop an automated fabrication unit for production of textile electronic components
- To fabricate completely integrated textile components
- To develop fully flexible textile antenna and sensors.







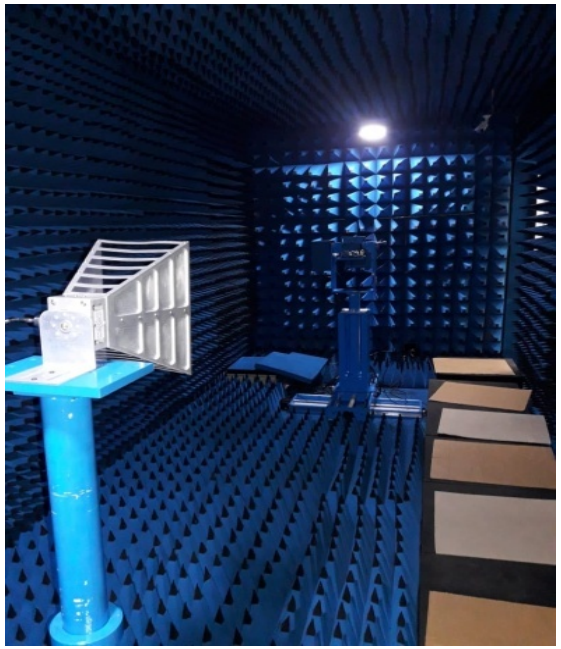
DST - SERB - CRG

Budget: Rs.36.73 L

Dr.M.Gulam Nabi Alsath

- To design a versatile frequency reconfigurable reflectarray antenna with wide angle beam scanning
- To develop a novel integrated reflecting element for improved aperture efficiency
- To integrate with an electronic control system for precise phase control of the reflecting element
- To provide a PC based solution for phase correction

Anechoic Chamber
(7 m x 3 m x 3 m)



800 MHz – 40 GHz

Institute and Industry Internships

To inculcate research practices in the student community, the department offers national and international internships in reputed Universities/Institutes and industries.

To name a few, the students of the department are encouraged regularly to take up international internships offered by universities in Italy, Japan, and USA.

- Brigham Young University, USA
- University of Catania, Italy
- DIAT-Pune

The students are also taking up paid internship offers (10k to 25k per month) from PSUs of the government of India and several other institutes of national importance during second year,

- CSIR
- TATA Elxsi
- Alcatel Lucent
- BIG CAT Wireless
- HCL Technology
- TRANE Technologies

Alumnus in Industry

- ✓ QUALCOMM
- ✓ TATA ELXSI
- ✓ HCL
- ✓ WIPRO
- ✓ Cognizant Technology Solutions
- ✓ Hexaware Technologies Solution
- ✓ Alcatel-Lucent Enterprise
- ✓ Tata Consultancy Services
- ✓ Valeo India Pvt Ltd
- ✓ Triumph Solutions Private Limited
- ✓ Tessolve Semiconductor Pvt Ltd
- ✓ Renault Nissan technology and business Centre
- ✓ Bigcat Wireless
- ✓ Sameer
- ✓ Synopsys
- ✓ Huawei
- ✓ Comcast Technology Solutions
- ✓ Wabco
- ✓ Microchip
- ✓ Intel
- ✓ Bosch
- ✓ Visteon

Alumnus in Higher Education

- ✓ IISc Bangalore
- ✓ IIITDM, Kancheepuram
- ✓ IIT Madras
- ✓ IIT Bombay
- ✓ IIT Indore
- ✓ NIT Trichy
- ✓ University of Catania, Italy
- ✓ Aalto University, Finland
- ✓ Florida international university, Miami, USA
- ✓ SSN College of Engineering
- ✓ Anna University

ME Admission

Thank you

Queries?