

KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506015, TELANGANA, INDIA काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - గం౬ ం౧గ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal) (Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

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### Department of Electronics & Instrumentation Engineering

## Department Research & Education Centre (DREC)

# Embedded Systems



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#### **About DREC:**

strong foundation to the students on microcontroller architecture and its programming. The main aim of this Research & Education Centre is to provide hands-on training to interface different I/O devices, sensors and motors to 8051 & ARM Cortex-M4 microcontrollers using latest microcontroller hardware and software platforms. The skills acquired through the experiments conducted in this Centre help the students to do their project works and enhance their knowledge on the latest embedded technologies. This Centre provides all facilities for the students to make them industry ready in the field of embedded systems.

The Embedded Systems Research & Education Centre aims to provide a



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- To provide strong foundation in programming microcontrollers using Assembly and C-languages.
- To help the students to do their project works.

# Functions of DREC:

- Provides all facilities for the students to make them industry ready in the field of Embedded systems.
- Supervising student projects and internships related to Embedded systems.
- Providing a platform for students to gain practical experience and contribute to ongoing research activities.



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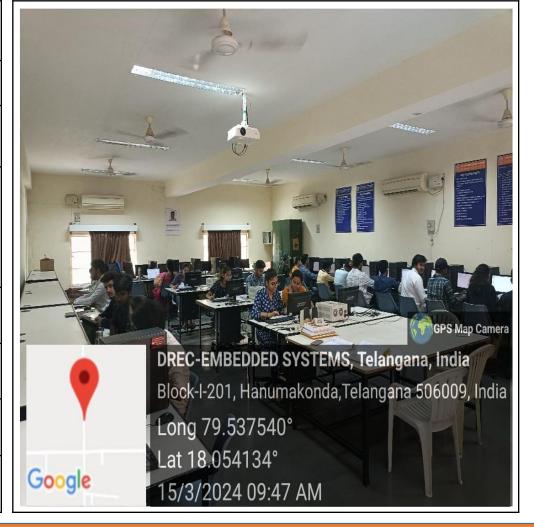
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S. No.	Equipment Name	Cost
1.	Easy 8051 V6_development systems	1,90,800.00
2.	Tiva C series TM4C123G Launch pad Evaluation board (EK-TM4C123GXL)	23,364.00
3.	Interfacing Components	1,45,000.00
4.	Desktop Systems	19,08,000.00
5.	Keil_μVision & Python	2,39,998.00
6.	Microsoft Macro Assembler (MASM)	





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#### **Projects / Research carried out in DREC – Embedded Systems**

- S. No. Name of the Project / Research carried out in the DREC
  - 1. UG Student Project on Heart rate monitoring
  - 2. **UG Student Project on Vehicle tracking system**
  - 3. UG Student Project on Patient monitoring system



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# Projects / Research carried out in DREC - Embedded Systems

**UG Student Project on** 

Automatic food ordering system

