A 5-day Workshop on
IoT Using Raspberry Pi
(27th February to 3rd March 2023)
Organized by
**DEPARTMENT OF INFORMATION TECHNOLOGY and
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**
BHOJ REDDY ENGINEERING COLLEGE FOR WOMEN, HYDERABAD
In association with
CENTER FOR CONTINUING EDUCATION (CCE) & DEPARTMENT OF COMPUTER SCIENCE & ENGG, NIT-WARANGAL

About NIT Warangal:

National Institute of Technology Warangal, formerly known as Regional Engineering College, was established in 1959. Over the years, it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 13 departments offering eight undergraduate and 32 postgraduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study in the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure, a state-of-the-art library, seminar halls, well-equipped laboratories, and a guest house.

About Center for Continuing Education:

The Center for Continuing Education of NIT Warangal organizes FDPs, training programmes, seminars, workshops, etc. in the frontier areas of science, engineering, technology, management, humanities, social science and socially relevant themes on self-financing basis in three different modes: (i) At NIT Warangal (ii) At NIT Warangal in collaboration with other organizations, engineering Colleges, and institutes iii) By NIT Warangal faculty at the host institute or organization

About Bhoj Reddy Engineering College for Women

Bhoj Reddy Engineering College for Women is sponsored and managed by Sangam Laxmibai Vidyapeet, a registered voluntary social action group working since 1952 for the empowerment of women and girls through education. The Vidyapeet has more than 70 years of experience in the field of education. The college has well-experienced and committed faculty. The faculty's development is actively pursued on a continuous basis. The college offers five UG (B. Tech) programs. BRECW is striving hard to empower the women students in their technical knowledge and assimilate adequate skills through the teaching by eminent faculty.

About IT and CSE Departments:

The IT and CSE departments have well experienced faculty and well-established computer laboratories with high-speed interconnections. Both departments have an intake of 120 seats. The department's motive is to provide students with the skills and knowledge they need to take on appropriate professional positions upon graduation and grow into leadership positions.
The departments conduct workshops, seminars, guest lectures, webinars and various training sessions to make students strong enough in theoretical and practical skills that enable them to adapt themselves to the global market.
Both departments have a high rate of placements.

Course Objectives

- Upon the completion of the training programme, the participant/trainee can understand or gain knowledge to solve the real-world problems in IoT using the Raspberry Pi.
  - The latest tools and techniques for IoT using the Raspberry Pi.
  - Research-oriented problem solving in IoT using the Raspberry Pi.

Programme aims in understanding the following:
- IoT introduction, IoT boards, use cases of IOT.
- Introduction to Raspberry Pi, Installation, Setup and Configuration pi.
- Working with LEDs, buttons, buzzers and different sensors like DHT, Ultrasonics.
- Creating weather monitor system and analyzing the collected data.
- Develop smart agriculture systems using different sensors.
- Develop a smart city system environment and use Ubiclouds for data alerts.
- Develop a smart Traffic Management System and operate it using a chatbot, integrate Translato.
- Overview of Packet Tracer and Smart Home Development.

90% of the session will be hands-on/practical.

Resource Persons:
The sessions will be handled by the experts from **IITs, NITs, Central universities and the software industry.**

Who should attend?
The Programme is open to all faculty and students of BRECW.
Certificate: Participants will get a hard copy of a **certificate** upon completion of the workshop.
Registration link:
https://docs.google.com/forms/d/e/1FAIpQLSewRh0_ReQcM90kz4CZOsajCUXLZ6CEbD4VaKibBBPYWBhrA/viewform?usp=pp_url
For further queries, please contact the coordinators.

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