



St. Francis

College for Women

Begumpet, Hyderabad-500016

(Autonomous & Affiliated to Osmania University)

NAAC Re-accredited with 'A' Grade 4th Cycle

भारत सरकार
GOVERNMENT OF INDIA

विज्ञान और प्रौद्योगिकी मंत्रालय
MINISTRY OF SCIENCE AND TECHNOLOGY



जैवप्रौद्योगिकी विभाग
DEPARTMENT OF
BIOTECHNOLOGY

सत्यमेव जयते

ST. FRANCIS COLLEGE FOR WOMEN, HYDERABAD ACADEMIC YEAR 2025 - 2026 DEPARTMENT OF COMPUTER SCIENCE

Report on the Inter College Robotics Workshop Conducted on 6th & 7th March,2026.

Time: 9:00 a.m-3:00 p.m.

Brochure:



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DBT STAR College
Department of Computer Science
organizes

C@nnect 8.14

INTER COLLEGE ROBOTICS WORKSHOP

📅 6th & 7th March 2026 ⌚
9:00 - 3:00 PM
Venue: Computer Lab, PG Block

Scope of Workshop:

- ✓ Hardware: Hands-on assembly of 4WD rovers and multi-leg Dino robots.
- ✓ Navigation: Implementing-based line following and autonomous obstacle avoidance.
- ✓ Programming: Coding motor drivers and AI controllers for gait and navigation logic.

Register here →

Innovate. Create. Automate.

The Department of Computer Science, organized C@nnect 8.14 – A Two-Day Inter-College Robotics Workshop on 6th and 7th March 2026, bringing together selected students from various colleges across the twin cities for an immersive hands-on learning experience in robotics. The resource person for the workshop was Mr. Ravi Teja.



Objectives:

- To provide hands-on experience in basic robotics.
- To understand motor control using L298N and PWM.
- To implement IR line follower and obstacle avoidance robots.
- To introduce autonomous navigation using sensors.

Outcomes of the Event:

- Students gained practical exposure to assembling robotic hardware components and understanding their connections.
- Participants learned to control DC motors using the L298N motor driver and understood H-bridge wiring for direction control.
- Students implemented PWM techniques to regulate motor speed efficiently.
- Learners calibrated IR sensors and developed logic for accurate line detection.
- Participants designed and tested a working IR line follower robot capable of following predefined paths.
- Students integrated ultrasonic sensors for distance measurement and obstacle detection.
- Participants used servo motor scanning to improve obstacle detection range.
- Learners developed basic collision avoidance logic for autonomous robot movement.
- Students demonstrated simple autonomous navigation by combining motor control and sensor input.
- The workshop improved students' hands-on skills, logical thinking, and confidence in building robotics projects.



Pictures:



Resource person during the session



Students engaged in the workshop

Savithri

DBT Coordinator