BVV Sangha, Bagalkot
AMRUTA INSTITUTE OF ENGINEERING & MANAGEMENT SCIENCES
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A I E M S
B E N G A L U R U

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ROBOTICS SKILL LAB
REPORT
2025-2026

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In everyday life, robots are increasingly becoming an integral part of modern society. They actively support human activities in various domains such as home automation, the automotive sector, healthcare, industrial automation, and several other application areas. Recognizing the growing importance of robotics, the Department of Electronics and Communication Engineering at Amruta Institute of Engineering and Management Sciences initiated a Robotics Skill Lab to equip students with essential practical skills. The primary objective of this initiative is to enhance students' understanding of robotic systems and strengthen their programming capabilities.

During the academic year 2025–2026 odd semester, the Robotics Skill Lab was successfully conducted for students of the Electronics and Communication Engineering program. The structured training program was designed to provide both theoretical knowledge and hands-on experience. The course flow included an introduction to robotics and its application areas, followed by practical sessions on robot car assembly. Students were introduced to the Arduino Nano platform, learned Arduino programming concepts, and became familiar with the Arduino IDE. The program also covered developing programs for various applications using different sensors, enabling students to gain real-time implementation experience.

Photo1: Students conducting robotics programming

Photo2: Students conducting robotics programming

Photo3: Robotics car assembled by students.

Photo4: Hands on session on robot car assembly