

BPL001 Introduction to Robotics

Course Description

The field of Robotics is at a fascinating and exciting point in its evolution. Robots are no longer confined to the realms of industry and research, they are rapidly becoming a part of daily life.

This course provides Middle School students with an introduction to fundamental concepts and practical application of tools and techniques for building robotic systems in order to inspire further study and participation in High School and College programs.

Hands-on laboratory exercises provide experience with embedded systems, programming, circuits, motors, sensors and servos.

Students collaborate on their own autonomous robot platform to implement dynamic physical behaviors such as: edge detection, line following, collision detection, orientation, proximity sensing, audio & lcd text output, image sensing and servo controlled arm manipulation.

Short lectures connect the laboratory exercises to current state of the art happenings across the field of Robotics and beyond.

Prerequisites

None! This class is for motivated beginners.

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