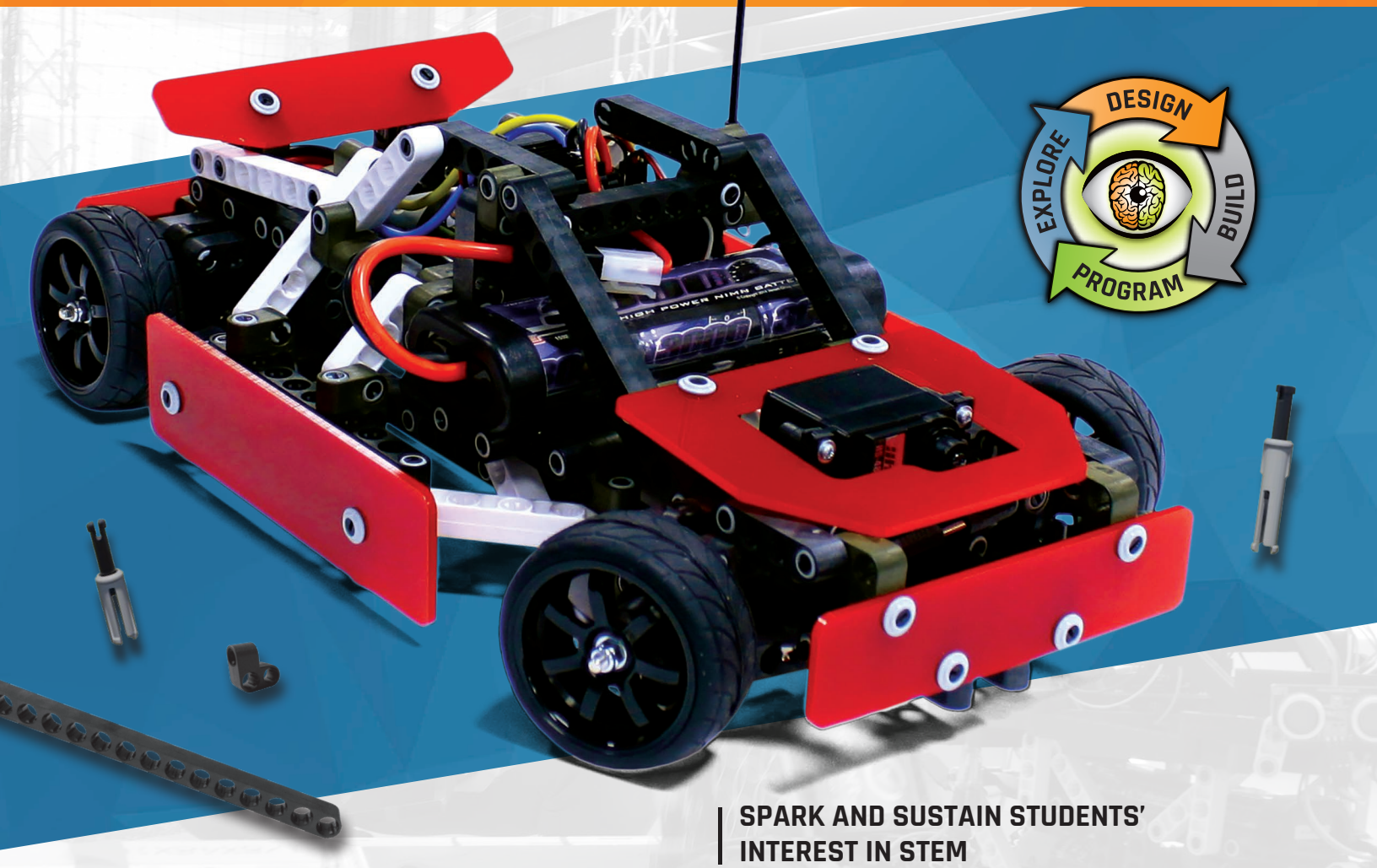
ELECTRIC CAR LAB

MCK-ECLB-2WD



MINDS-i STEM INTEGRATED ELECTRIC CAR LAB

This fast and sleek 1/10th scale electric car comes with all the electronics and hardware needed to assemble the kit, and includes easy to use visual instructions. This kit is also compatible with most hobby standard DC motors, gears, radio transmitters, servos, bodies, wheels, tires and more.

SPARK AND SUSTAIN STUDENTS' INTEREST IN STEM

MINDS-i Robotics engages students in an energizing STEM learning environment with easy to build and modify robots. Technologically advanced rovers and drones perform impressive real-world tasks that build excitement for STEM careers. The curriculum encourages collaborative problem-solving and fosters endless creativity. With outstanding technical support, teachers are empowered and students are inspired to build whatever they envision in their "mind's eye."

MULTIMETER

ESC

SERVO

23,500 RPM MOTOR

RC CONTROLLER

FIND YOUR MINDS-i SALES REPRESENTATIVE AT:

mindsieducation.com »

info@mymindsi.com »

CURRICULUM OUTLINE - 45 HOURS

Unit 1: Introduction to MINDS-i

- 1.1 Introduction to MINDS-i
- 1.2 Student Performance Development Process
- 1.3 What is an Electric Car?

Unit 2: Variables of Force & Motion

- 2.1 Force & Motion
- 2.2 Parts & Purposes
- 2.3 Gear Ratios; Speed & Torque
- 2.4 Inertia

Unit 3: Electrical Engineering & Energy Transfer

- 3.1 Energy Types & Transfer
- 3.2 Parts & Purposes
- 3.3 Electric Motors
- 3.4 Volts, Amps & Watts
- 3.5 Batteries

Unit 4: Culminating Project

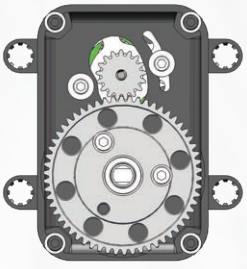
- 4.1 Preparing for the Challenge
- 4.2 Cleanup / Organizing

STEM INTEGRATED ROBOTICS FOUNDATIONS

This curriculum covers a multitude of engineering concepts including

- » Mechanical Systems
- » Electrical and Electronic Systems
- » Hands on Activities and Capstone Projects in each Semester

MOTOR CASE GEARS



- » Includes Metal Gears
- » 17 Tooth 32 Pitch Pinion Gear
- » 58 Tooth 32 Pitch Spur Gear
- » Adjustable Motor Mount Accommodates Many Additional Gear Ratios
- » Aluminum Main Shaft with Dual Ball Bearing Mounting

ELECTRIC CAR