



RoboChallenge: LEGO Robotics in MESA and K-12 Schools One-Pager

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Course Description: Get an overview of exciting early engineering initiated by UCSB's RoboChallenge program. Learn practical tips for working with LEGO Robotics in K-12 schools, including materials, programming, competition rules, and guiding students through challenges. Hear about new possible robotics competitions for MESA.

Workshop Overview:

RoboChallenge: RoboChallenge is a program designed to reach students from under-served communities surrounding The University of California at Santa Barbara, with the highly motivating and richly educational field of robotics. Students in RoboChallenge build LEGO robots for a variety of challenges, such as Sumo, Tug O' War, and Linefollowing. Since 2000, RoboChallenge has offered robotics engineering experiences to 100-250 students each year.

<http://homepage.mac.com/mrlaurie/robo/robochallenge.html>

Robotics Science Class: The Robotics Science Class has been offered to students at El Camino Junior High in Santa Maria since 2003. In this class, students are taught all California State Standards for 8th Grade Physical Science, in addition to learning to build and program robots. This course is an outgrowth of the RoboChallenge program.

<http://homepage.mac.com/mrlaurie/roboscience.html>

Robotics Systems:

LEGO Mindstorms RCX (old), LEGO Mindstorms NXT (new), VEX

Competitions and Challenges:

Tug O' War, Sumo, Linefollowing, Drag Race, Navigation Challenge

NXT vs. RCX Programming

Draft Pilot MESA Robotics Rules:

Junior High: Tug O' War

Senior High: Sumo

Resources

All workshop resources posted here: <http://homepage.mac.com/mrlaurie/robo/MASME08.html>

My Site: <http://homepage.mac.com/mrlaurie/>

email: mrlaurie@mac.com

RoboChallenge: <http://homepage.mac.com/mrlaurie/robo/>

Robotics Science Class: <http://homepage.mac.com/mrlaurie/roboscience.html>