

Proposed Daily Schedule – Exploring Engineering Through Robotics

For Exceptional Students - Grades 10 and 11

Sponsored by the Ohio Department of Education and The Ohio State University

Instructional Team: Four Engineering Faculty Members, Two Graduate Teaching Associates, Four Undergraduate Teaching Associates

Three Sessions – July 6-10, July 13-17, & July 20-24, 2009

Some events and times may change

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:30-9:30 AM	Institute Introduction and Goals Overview Intro to Lego Mindstorms	Sensors and Complex Programming Discussion	Load Bus & Travel Tour 1	Introduction to the Design Project	Design Project Building and testing Preliminary Tests
9:30 - 10:30 AM	Intro to Mindstorms Kit and Chassis Build	Mindstorms Exercise 1 Sensors	Tour 2		
10:30-11:30 AM	Testing the first robot and sensors	Line Finder Task	Load Bus & Travel	Chassis Selection and Construction	Robot Demonstration from a college Robot Competition
11:30-12:30 PM	Lunch (North Commons)	Lunch (North Commons)	Lunch (North Commons)	Lunch (North Commons)	Lunch (Pizza - HI 0030)
12:30-1:30 PM	DC Motor Fundamentals Build a DC Motor	Mindstorms Exercise 2 Articulation	Introduction to Mindstorms Challenges Short Design Problems	Galloping Robot Seminar	Competition Set up
1:30 - 2:30 PM	<i>Team Lab Experience</i> Gears, Pulleys, Inclined Plane	Building and Testing Articulating Devices	Faculty Member Research Seminar	Design Project Refinement Exploring the Course	Parents Arrive 1:00 PM (Lab Tours) Competition Begins (HI 0035)
2:30 -3:30PM	Testing Drive Trains Pulling weights	Mindstorms Exercise 3 Locate and transport object	Continuation of Mindstorms Challenges Short Design Problems: Line Following Collision Avoidance	Robot Construction	Program Concludes by 4:30 Return Lego Mindstorms kit
3:30 - 4:30 PM	Refining Drive Trains				
	Daily Discussion & Eval	Daily Discussion & Eval	Daily Discussion	Daily Discussion & Eval	5:00 Check out of dorm

