# **Robotics Summer Camp**

## **An Amazing Summer Opportunity!**

Robotics Engineering Summer Camp is a program offering young students an opportunity to work with engineers, have hands-on experiences, and critique programs and training equipment.

### **Designed for Select Students**

This special program is designed for a select number of middle and high school students. Upon completion of the program, students will receive a Certificate of Achievement, which can be included in student portfolios for college admission or resumes for future employment.

### **Eligible Students:**

The following selection criteria has been suggested:

- Grades of at least C in all subject areas.
- Passed 8th grade ISTEP.



- Good school attendance.
- No behavior problems.
- Recommendation by the guidance counselor.
- A personal commitment to attend all sessions.
- A commitment from parents to provide transportation and the \$90 student camp fee.
- A parental signature will be required releasing all parties from liability for injury or property damage.



# **Robotics Summer Camp**



2013 Robotics Attendees

# **Learning Format**

- Students will be supervised throughout the experience by an Amatrol Certified Instructor.
- Learning will be conducted using a combination of group and individualized sessions.
- The major portion of the program, (robotics programming and operation), will be delivered in an individualized format using Amatrol's student learning materials.
- Aisin and Toyota professionals will assist students individually as they progress through the material.
- Group sessions include activities such as presentations about the Amatrol design process and engineering-related careers as well as discussions of student results and analysis.
- Classes will meet at Aisin Human Resources Development Center with tours of Aisin and Toyota facilities.



Jackson County Industrial Development Corporation

# Fifth Annual Robotics Engineering Summer Camp July 7-11, 2014



# Presented by:

Aisin Companies of Jackson County

Toyota Industrial Equipment Manufacturing Inc.

Jackson County Industrial Development Corporation

Amatrol, Inc.

Ivy Tech Community College

Purdue School of Technology

Robotics Engineering Summer Camp is a program for aspiring robotics engineers and students seeking an overview of career opportunities available in business, engineering, and technology. Classes will meet at Aisin Human Resources Development Center with tours of one or more of their local companies.

# **Robotics Engineering Summer Camp**



Economic Opportunities thru 2015

### **CAMPACTIVITIES**

# Overview of Business, Engineering & Technical Careers

- An overview of the career opportunities available in business, engineering, and technology.
- Tour the Aisin and Toyota facilities and meet with people who are actually working in these careers to learn what it is like to work in a technical field.

#### Dream !t Do !t

YOUR FUTURE IS HERE FOR THE MAKING

• Overview of EcO15 and Dream !t Do !t

### **Robotics Engineering**

- Learn about robotics through hands-on experiences with real robots in Aisin's training facility.
- Use Amatrol's student learning materials, which include both print-based and interactive multimedia formats.

# Camp Students Will Learn How To:

- Operate a servo robot.
- Program a robot to perform variety of applications:
  - -Pick and place material handling
  - -Interfacing to sensors
  - -Conveyor control
  - -Assembly
  - -Quality assurance
- Design robot programs/work cells from given design criteria.
- Use Robotics Simulation Software to design and simulate robot programs and their work cells on a PC.

### **Business Enterprise**

Students will learn about overall aspects of running a business. Students will experience working in a modern business environment using teams, project plans, and creative problem solving materials. The skills developed by the students will be applied to a robotic project.

## **Project Development Process**

- Students will learn how engineers design new products by working with Aisin and Toyota engineering team.
- Test-drive one of Amatrol's latest products and offer critiques to the design engineers as part of the continuous improvement component of Amatrol's process.



## **College Program Opportunities**

Students will receive information about engineering and technical programs to pursue at Ivy Tech Community College and Purdue College of Technology.





**COLLEGE OF TECHNOLOGY** 



#### **CAMP SCHEDULE:**

July 7-11 Monday 8:30 am to 4:00 pm Tues-Thurs 8:30 am to 2:00 pm

\*lunch will be provided

\*\*Family and friends are invited to attend a student demonstration Friday @ 12:30 p.m.

#### **CAMP LOCATION:**

Aisin Human Resources Development Center located at 1665 East Fourth Street (East Side Industrial Park) Seymour, IN

#### **CONTACT:**

For more information or to apply, contact Bob Sexton, Technology Instructor Seymour High School 812-522-4384 or e-mail at sextonr@scsc.k12.in.us.

#### **CAMP COST:**

\$90 per student
\*Financial assistance
available upon request
\*Applications and Waivers
are required.

