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ACTIVITIES

FIRSTSTEP has expanded! This year, we are offering **two one-week-long sessions**; each session's activities will be different, as seen below. **Your student can attend the first week, the second week, or both!**

LEGO SIMULATOR

Grades 1–8

Lego Digital Designer (LDD), a fun and educational computer program, gives students their **first experience creating a 3-dimensional model** on the computer **before even picking up a Lego brick**.

Week 1: Learning LDD tools; basic models and exercises.

Week 2: New students—Week 1 material; students with previous experience—advanced modeling assignments and learning new features of LDD.

LEGO CHALLENGE

Grades 1–8

Take the next step forward after Lego Simulator by building a Lego robot that will complete **specialty designed tasks**. This challenge develops **building skills** through **teamwork** and teaches basic **programming skills** using an intuitive drag-and-drop method of programming using *Lego Mindstorms 2.0*.

Week 1: Programming and building lessons; students will face the challenges of a specially designed game, "City Saver".

Week 2: Week 1 material with the game "The Driving Test".

INVENTOR

Grades 5–8

Learn how to use Autodesk Inventor, a program used by **professional engineers** in the real world to create detailed models. This software is also taught in the **Introduction to Engineering and Design** class at Carmel High School. From learning how to make a basic cube to replicating physical objects, students will gain a fundamental understanding of design and modeling.

Week 1: Basics of Inventor; simple 3D modeling assignments.

Week 2: New Students—Week 1 material; Students with previous experience—higher level features and complex modeling assignments.

VEX CHALLENGE

Grades 5–8

The TechHOUNDS build a robot from scratch in six weeks every year to compete in a complex game. This challenge gives students a first-hand experience of what we do for a robotics competition in a **scaled-down version**. Students will receive one week to create a **remote-control robot** that will play in specially designed games. They will experience the same **brainstorming process, design phases, prototyping, and competing** as the TechHOUNDS do. Thus, this challenge is beneficial for students wanting to join the Robotics Team when they come to high school, as well as those who wish to be exposed to an energetic learning environment.

Week 1: Basic building lessons with a TechHOUNDS student mentor; students will play the game, "Block n' Load".

Week 2: Week 1 material; students will speed off into the game, "Overdrive".

WORKSHOP

Grades 5–8

In this activity, students will learn how to properly and safely operate the power tools in our fully-equipped machine shop used by the TechHOUNDS Robotics Team. They will learn how to handle metal and hardware one-on-one with a TechHOUNDS student mentor.

Week 1: Students will build a toolbox.

Week 2: Students will build a briefcase.

FIRSTSTEP CAMP INTRODUCTION

The FIRSTSTEP Summer Camp was created by the **Carmel High School TechHOUNDS Robotics Team** to lead younger students with interests in **science** and **technology** on their "**first step**" in learning more about these growing fields. This camp was first introduced in the summer of 2007 with a goal of extending our knowledge to younger students—and possibly future members of the robotics team.

From **designing** to **building** and **working with tools** in the shop, this program teaches students the basic skills used by TechHOUNDS team members, useful for high school and beyond.



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GENERAL INFORMATION

Student Name

Grade

Parent Name

Parent E-mail

Address

Phone

Alternate Phone

Medical/Emergency

Concerns: _____

Emergency Contact: _____

Relation: _____

Phone: _____

ACTIVITIES REGISTRATION

Please check the box corresponding to the desired week and activity.

Don't forget to check out the **discount packages** at the bottom of the page!

Mail completed **registration form, general information** (located on reverse page), and **payment** to:



Carmel High School, Attn: George Giltner

520 East Main Street
Carmel, IN 46032

or give these forms/payment to your respective
Middle School Technology Teacher.

Activity	Time	Cost	Week 1	Week 2
Lego Simulator	8:00-8:45	\$50		
Lego Challenge	9:00-11:00	\$75		
Inventor	11:30-12:30	\$60		
VEX Challenge	1:00-3:00	\$85		
Workshop	3:30-5:00	\$75		
Please make checks payable to "Carmel High School TechHOUNDS".	T-Shirt (Youth XS-XL and Adult S-XL)	\$10	Quantity: Size(s):	
	Total Price			

OR

DISCOUNT ENGINEERING PACKAGES

Engineering Package	Cost	Week 1	Week 2
All-Day One Week Pass Savings of \$55 (Includes 1 T-Shirt)	\$300		
All-Day Two Week Pass Savings of \$200 (Includes 1 T-Shirt)	\$500		
Package Included T-Shirt (Youth XS-XL and Adult S-XL)		Size:	



Please visit our website

www.TechHOUNDS.com

for more information about our Robotics Team,
details about FIRSTSTEP, and so much more!

CHS TECHHOUNDS ROBOTICS TEAM

MAIN CONTACT

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ADDRESS

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Carmel, IN 46032



INTRODUCING
2 SESSIONS!

JUNE 14–18, 2010



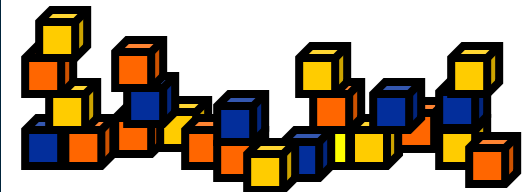
JUNE 21–25, 2010

PRESENTING THE 2010

FIRSTSTEP

SUMMER ROBOTICS CAMP

INFORMATION
AND REGISTRATION



CARMEL HIGH SCHOOL
TechHOUNDS ROBOTICS
TEAM 868