Registration Form

Technology Enrichment Program
TEC-SMART

PLEASE COMPLETE ALL INFORMATION

Student's Name

_____
First Middle Last

Age _____ Date of Birth _____

Student's Social Security Number _____

Sex (M/F) _____ Grade Entering (Sept. 2012) _____

Address _____

_____
City State Zip

Home Phone _____

Mother's (or Guardian) Name

_____

Work Phone _____ Cell Phone _____

Father's (or Guardian) Name

_____

Work Phone _____ Cell Phone _____

Parent e-mail address _____

Can we contact you with information about summer camp?

❒ Yes ❒ No T-shirt size YS YM YL AS AM AL AXL

ALL TUITION AND FEES ARE PAYABLE IN FULL AT THE TIME OF REGISTRATION.

Method of Payment: ❒ Check enclosed ❒ MasterCard ❒ Visa

Account # _____

Security Code (3 digit) _____ Expiration Date _____

Cardholder's Name _____

Cardholder's Signature _____

PLEASE MAIL COMPLETED REGISTRATION TO:

Hudson Valley Community College
Office of Community and Professional Education
80 Vandenburgh Ave.
Troy, NY 12180
Phone (518) 629-7339 / Fax (518) 629-8103

www.hvcc.edu/kidscamps

Held at TEC-SMART

Saratoga Technology + Energy Park® (STEP®)
345 Hermes Road
Malta, NY 12020

What is TEC-SMART?

Located in NYSERDA's Saratoga Technology and Energy Park® (STEP®), TEC-SMART isadjacent to the GlobalFoundries FAB 8 facility. It features more than a dozen state-of-the-art classrooms and laboratories used to train the workforce in semiconductor manufacturing and green technologies, including home energy efficiency, alternative fuels, solar, geothermal and wind energy. In addition, courses will be offered at the facility in business and the liberal arts and sciences.

TEC-SMART is a collaboration between Hudson Valley Community College and the New York State Energy Research and Development Authority (NYSERDA). We are working together to create a thriving future for high-tech and environmentally sound technologies in the Capital Region.

Co-sponsored by:

Ballston Spa Central School District
Educating Everyone Takes Everyone

www.hvcc.edu/tecsmart

Technology Enrichment Program

for high school students

Held at TEC SMART

Saratoga Technology + Energy Park® (STEP®)

The Office of Community and Professional Education

Hudson Valley Community College

Technology Enrichment Program

for students
entering grades 9 12

Hudson Valley Community College offers a new opportunity for high school students to discover their interests and talents in the fields of nanotechnology, alternative energy, electronics, and more.

Dates: July 9 - 13, 9 a.m. - 1:30 p.m.
Cost: $195
Includes course materials and a t-shirt

Program Instructors:

Mike Potter *has been teaching middle and high school technology classes for 15 years. He teaches Design and Draw, Woods and Metal Processing, Electronics, and Nanotechnology. He attended the Nanotechnology Curriculum Development Summer 2008 Institute at RPI and also assists the First Robotics Team at Ballston Spa Central School District.*

Jerry Wawrzyniak *has been a technology and pre-engineering instructor at Ballston Spa High School since 2000. He teaches Digital Electronics and Video Game Design.*

Lunch for Technology Enrichment Program

Students will have 30 minutes for lunch and are expected to bring their own lunch and beverage. Limited vending machines are available.

Course Descriptions:

The Technology Enrichment Program includes five modules that explore different topics in technology.

Electronics

This introductory course will expose you to basic electronic circuit fabrication as you build a project to take home at the end of the week. During the course, you will learn to identify and test common electronic components. Basic testing procedures using a digital volt-ohm meter will be demonstrated. Soldering techniques and trouble shooting of circuits will be demonstrated. This course will be of interest to any student exploring future studies or careers in engineering.
Jerry Wawrzyniak, Ballston Spa High School, Instructor

Video Games

Students will design and program a 2-D video game. Video game design concepts will be introduced. Basic programming of characters and objects will be covered. Please bring a USB Flash Drive to save your game.
Jerry Wawrzyniak, Ballston Spa High School, Instructor

Introduction to Photolithography Concepts
(Via printed circuit board (PCB) manufacturing)

How small is nano and how do we measure it? We will investigate how to measure objects that we cannot see and what tools are used to measure them. In addition, we will manufacture a printed circuit board using a process similar to the photolithography in semiconductor manufacturing.
Mike Potter, Ballston Spa High School, Instructor

Nanocrystalline Solar Cell Assembly

Clean energy and photovoltaics are our topics as we investigate current trends and demands in solar cell fabrication and use. We will then manufacture and test a dye sensitize nanocrystalline solar cell. We will also cover the unique properties of materials at the nanoscale level.
Mike Potter, Ballston Spa High School, Instructor

Hydrogen Power

We will investigate current trends in hydrogen power and then build and test a hydrogen powered car that runs on distilled water. Students will learn how the reversible fuel cell works and creates usable energy by separating water into hydrogen and oxygen.
Mike Potter, Ballston Spa High School, Instructor