

PROJECT LEAD THE WAY (PLTW)

State of Michigan PLTW University Affiliate - Eastern Michigan University
Summer 2007 On-Campus Training Institutes

URGENT: SUMMER COURSE ENROLLMENT DEADLINE - APRIL 1, 2007

PROJECT LEAD THE WAY is a hands-on, project based curriculum for Middle School and High School science and technology education. The nationally successful **PLTW** curriculum and delivery approach teaches traditional science and math subjects in a highly effective way that meets the requirements of *STEM* (science, technology, engineering, and math) education while stimulating relevant career interests in these fields. The innovative **PLTW** approach to *STEM* education prepares students for the rigor of higher education and aims to interest and prepare students for professional careers in these fields, which are critical for today's global economy.

At the middle school, the project-based, curriculum, *Gateway to Technology* provides five units of study: *Design and Modeling*, *The Magic of Electrons*, *The Science of Technology*, *Automation and Robotics*, and *Flight and Space*. These units are designed to captivate the middle school student's interest while at the same time address national standards in math, science and technology.

Gateway to Technology reaches out to students of many experiences, and also focuses its goals to increase the interest and awareness of female and minority students in technology-related careers. Review **PLTW** curriculum samples for yourself on the **PLTW** website: <http://www.pltw.org/>

At the high school, **PLTW** is comprised of a four-year sequence of courses. When combined with college preparatory courses in science and mathematics, students are introduced to the rigor, scope and excitement of engineering and engineering technology. With its "user-friendly" approach, **PLTW** also builds a "Can Do" attitude which encourages students who may have been wary of science and math subjects. *Introduction to Engineering Design*, *Digital Electronics*, *Principles of Engineering*, *Computer Integrated Manufacturing*, *Civil Engineering and Architecture*, *Biotechnical Engineering*, *Aerospace Engineering*, and the **PLTW** capstone course, *Engineering Design and Development* are the exciting class offerings for high school students.

Introduction at the high school level allows students to more knowledgeably explore their own interest in engineering and related careers. Students who participate in **PLTW** are better prepared for these college courses, thus helping to reduce the national attrition rate currently at an alarming (50%) or better rate.

A critical component of the **PROJECT LEAD THE WAY** program is its comprehensive teacher training model provided through specially trained EMU college professors. EMU, has been designated by the national **PLTW** organization as its State of Michigan University Affiliate. EMU and **PLTW** together offer ongoing training, accessible throughout the year, which supports teachers and provides for continuous improvement of their skills.

INSTITUTE SCHEDULE:

EMU-PLTW

Summer Training Institute - Courses & Schedules, 2007

- *Gateway to Technology* Middle School Teachers July 22-August 3
- *Principles of Engineering* High School Teachers July 8-July 20
- *Digital Electronics* High School Teachers July 8-July 20
- *Intro. to Engineering Design* High School Teachers July 22-August 3

Important Information:

- Course fee: \$2000, includes breakfast and lunch each day
- Four semester hours of Graduate Credit can be earned.
- On and off campus low cost housing is available
- Perkins funding may be used to cover institute costs

For Questions please call or e-mail

- Dr. Phillip Cardon 734-604-7784 phillip.cardon@emich.edu
- Mr. Al Tessmer 313-682-7848 cell atessmer@emich.edu
- Dr. Paul Kuwik 734-487-1165 paulkuwik@emich.edu

SIGN UP YOUR SCHOOL and Reserve Your Place Today:

Follow step-by-step directions on the PLTW website:

<http://www.pltw.org/joinpltw-new.html>

Click ***How to Join*** on the pull-down menu

Fill out the “School Application” Form

Questions: Contact PLTW staff member, Crickett Thomas-Odell listed on the ***How to Join*** page or the EMU-PLTW staff members listed above.

We Look Forward to Seeing You This Summer at EMU-PLTW