



project lead the way high school program

Waterloo Community Unit School District #5 offers updated, challenging high school curriculum to develop our students' higher-level critical thinking and real world problem solving skills. An example of our commitment to increased student achievement is the introduction of a dynamic, new program, Project Lead the Way. Project Lead the Way is a national non-profit organization established to help schools give students the knowledge they need to excel in high-tech fields, focusing specifically on the integration of pre-engineering concepts and advanced technology.

The High School Program is a four year sequence of courses which, when combined with traditional mathematics and science courses in high school, introduces students to the scope, rigor and discipline of engineering prior to entering college. However, those not intending to pursue further formal education will benefit greatly from the knowledge and logical thought processes that result from taking some or all of the courses provided in the curriculum.



Our sequence of courses at this time:

- **Principles of Engineering** – Our introductory course that helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.
- **Digital Electronics** – Our year two course in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices.
- **Biotechnical Engineering** - (This third level course will be introduced during 2008-09 school year) Relevant projects from the diverse fields of bio-technology, bio-engineering, bio-medical engineering, and bio-molecular engineering enable students to apply and concurrently develop secondary-level knowledge and skills in biology, physics, technology, and mathematics.

To learn more about our pre-engineering program available for our high school students, please join us for:

Introduction to Engineering Night

January 23, 2007

6:30 – 7:30 PM

High School Library

Project Lead the Way Computer Lab