



# Pre-Engineering Academy

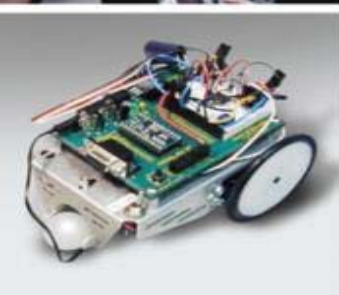
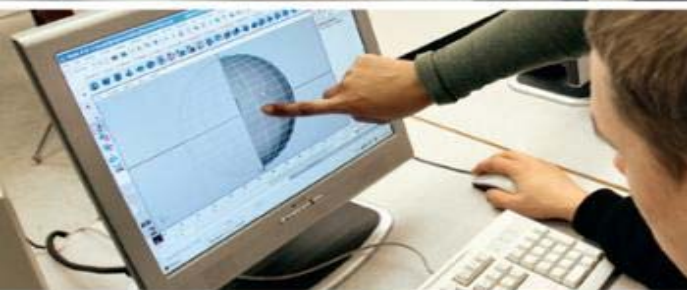
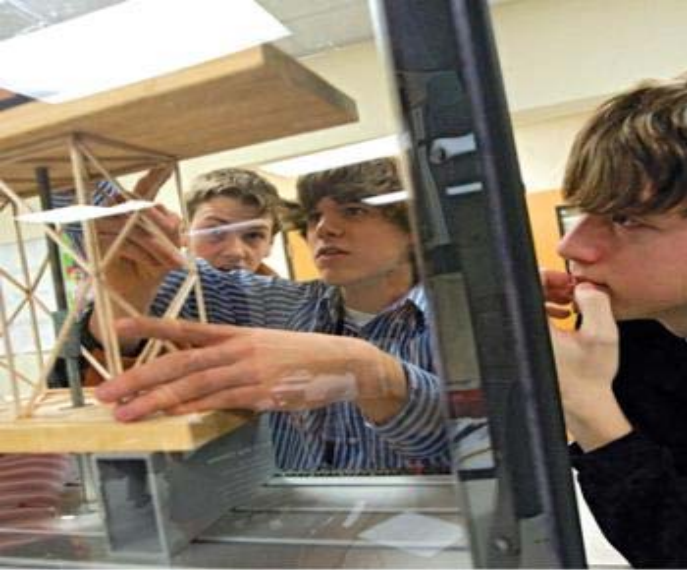
**GREAT PLAINS**  
Technology Center

# Pre-Engineering Academy

- Two-year college prep program; 3 credits per year
- Strongly focused on math and physics
- Engineering electives to help make decisions about college engineering
- College credit available for some courses
- Highly qualified instructors with industry and teaching experience

## Foundational Courses

- **Introduction to Engineering Design (IED)**
  - 3D computer modeling software; study of the design process
- **Principles of Engineering (POE)**
  - Exploration of technology systems and engineering processes
- **Digital Electronics (DE)**
  - Use of computer simulation to learn the logic of electronics



## Elective Specialty Courses



- **Aerospace Engineering (AE)**

- Aerodynamics, astronautics, space-life sciences, and systems engineering



- **Civil Engineering and Architecture (CEA)**

- Students collaborate on the development of community-based building projects



- **AP Physics**

- Students master advanced physics concepts such as kinematics, energy, collisions, fluids, optics, electricity, magnetism, sound, light, and nuclear energy.



- **AP Calculus (required if schedule permits)**

- Essential course to meet the challenges of an engineering degree. Arriving at a school of engineering with HS Calculus places a student in a much higher probability of success.