

## Focusing Education on the Future!



### CAREER PATHWAY

# POWER, STRUCTURAL & TECHNICAL SYSTEMS

Dual or Tech/Career Seal

People with careers in the Power, Structural, and Technical Systems pathway apply knowledge of engineering, hydraulics, pneumatics, electronics, power, structures and controls to the field of agriculture. One might design agricultural structures as well as machinery and equipment. They develop ways to conserve soil and water and to improve the processing of agricultural products.

## Major Courses

Students must take **THREE** pathway concentration courses and **ONE** additional pathway elective course.

### Pathway Concentration Courses (3):

- Agricultural Mechanics Technology I
- Agricultural Mechanics Technology II
- Agricultural Mechanics Technology III

### Pathway Elective Courses (1):

- Apprenticeship/Internship
- Arc Welding Process I
- Introduction to Manuf/Engineering Sciences
- Introduction to Precision Machining

## Other Recommended Courses

- Chemistry
- Computing in the Modern World
- Electrical Systems
- Environmental Science
- Foundations of Engineering & Technology
- Physics

## Post-Secondary Degrees, Diplomas, & Certificates

### Technical Colleges

- Electrical Controls
- Heavy Equipment Technology
- Industrial Mechanical Technician
- Mechanical Controls
- Welding and Joining Technology

### Colleges/Universities

- Agriculture
- Agricultural Engineering
- Agricultural Technologies
- Agriscience and Environmental Systems



Waste Water Treatment Plant Operator  
 Agricultural Applications Software Programmer  
 Global Positioning System Technician  
 Heavy Equipment Maintenance Technician  
 Computer Service Technical Support Technician  
 Agricultural Applications Software Developer

Equipment Parts Manager  
 Communication Technician  
 Database Administrator  
 Remote Sensing Specialist  
 Information Lab Specialist  
 Electronics Systems Technician

Agricultural Engineer  
 Recycling Technician  
 Machine Operator  
 Welder  
 Machinist  
 Engineering Specialist

C  
A  
R  
E  
E  
R  
S

## EMPLOYMENT OUTLOOK

Employment of individuals in the Power, Structural and Technical Systems pathway is expected to grow at about the same pace as the average for all occupations through 2010. Increasing demand for agricultural products, continued efforts for more efficient agricultural production and increasing emphasis on the conserving of resources should result in increased job opportunities in the coming years.