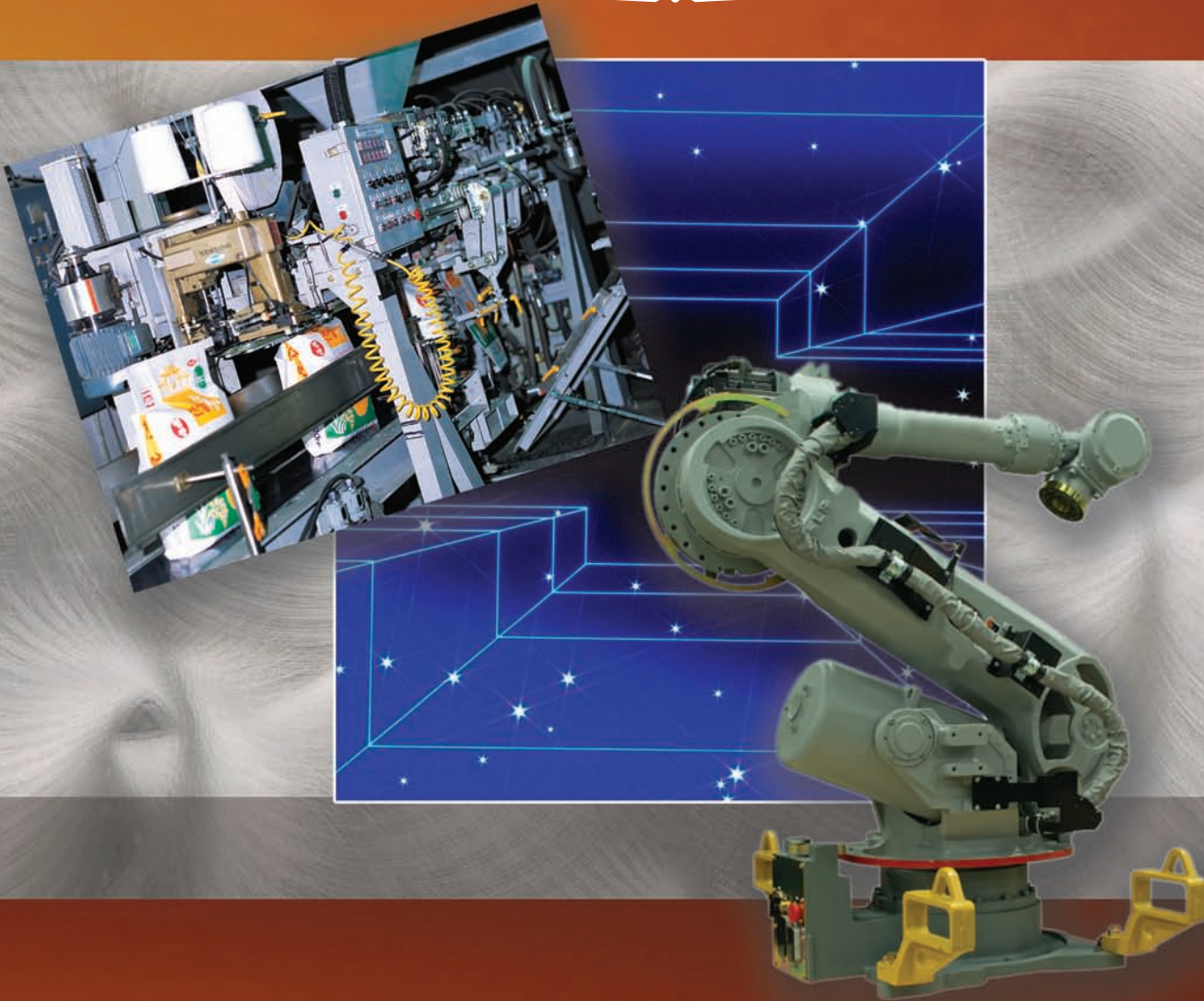

MECHATRONICS

Lining up on the fast track



MECHATRONICS IS A WORD COINED IN JAPAN IN THE 1970S IN CONJUNCTION WITH THE DEVELOPMENT OF ROBOTS THAT LED TO THE HIGHLY AUTOMATED PRODUCTION OF GOODS.

Seemingly, plant assembly lines have fewer – and sometimes no – people manning the stations these days. Robotics and computer numerical control (CNC) are the buzz words for meeting consumer needs through speedier and more low-cost mass production.

So why study mechatronics? What is the future in this field?

HACC students heading down this road learn multiple disciplines involving electricity and mechanics to become equipped as maintenance technicians and problem-solvers dealing with glitches in the assembly of goods, including robotic breakdowns.

MECHATRONICS

Lining up on the fast track

“No industry sector has become more technologically advanced and technology dependent than manufacturing. Manual skills are no longer considered primary for employment; the focus has shifted to a combination of mechanical and electronic technology skills.”

Mike Ross, President, Franklin County Economic Development Corporation

For more information about HACCs Technical College Program in Mechatronics in Franklin County call (717)385-2821 or e-mail esweaver@hacc.edu.



HACC does not discriminate in admission or employment on the basis of race, color, religion, political affiliation or believe, age, sex, national origin, ancestry, non-job related disability, place of birth, General Education Development Certificate (GED), marital status, sexual orientation, or veteran status.

HACC'S TECHNICAL COLLEGE PROGRAM IN MECHATRONICS

HACC and the Franklin County Career and Technology Center have partnered with Shippensburg University of Pennsylvania to offer students in Franklin County the opportunity to complete both an associate in science degree in Mechatronics and a bachelor of science degree in Professional Studies, Technical Management right in Franklin County.

Students who study industrial maintenance technology and mechatronics are prepared for employment as multi-skilled electrical-mechanical maintenance technicians in an industrial or manufacturing setting. Franklin County employers such as Tyco Electronics Corporation, Target Distribution Center, Volvo Construction, JLG Industries, Letterkenny Army Depot and Manitowoc Crane have projected openings for family sustaining careers in mechatronics and industrial maintenance in Franklin County.

THE CURRICULUM

HACC recommends students take this program in sequence – working from the diploma up to the degree courses. In this way, they can become employable while in college. All courses will be offered at the Franklin County Career and Technology Center.

The **diploma program** requires 25 credits including:

- 22 credits of safety in the workplace, industrial electrical systems, instrumentation systems, fluid power, power transmission, mechanical technology and,
- 3 credits of applied math.

Students completing the diploma program become industrial maintenance technicians.

The **certificate program** includes 35 credits such as:

- 3 credits of English composition or report and technical writing;
- 29 credits of major courses including those listed under the diploma program and electives ranging from management to other trades, and
- 3 credits of math.

Certificate recipients acquire advanced skills in such areas as power distribution systems and programmable logic control to use as electrical-mechanical maintenance technicians.

The **associate degree program** requires 65 credits with:

- 22 credits of English composition, report and technical writing, effective speaking, interpersonal communication, physical education and electives;
- 40 credits of the major dealing with the courses listed in the certificate program plus an increased number of program electives, and
- 3 credits of math.

Graduates earn an associate in applied science degree. Their opportunities are the same as certificate holders but also include project management. Median hourly wage and salary earnings are reported at \$41,060 a year for 2006 by the U.S. Bureau of Labor Statistics. Upon completion of the associates degree, students may enroll in Shippensburg University's bachelor completion program in Professional Studies with a concentration in Technical Management.

BENEFITS OF ATTENDING HACC'S MECHATRONICS PROGRAM IN FRANKLIN COUNTY

- Flexibility to study part or full time while meeting obligations in the workplace.
- All classes in the program will be offered at the Franklin County Career and Technology Center in Chambersburg, PA.
- Individual attention, small class sizes and student support services will be provided at the FCCTC.
- Opportunity for graduates to pursue a bachelor of science degree in Professional Studies with a Technical Management concentration through Shippensburg University of Pennsylvania.