Degree Benefits
The associate degree in Industrial Technology is designed to prepare professionals for employment in industrial and manufacturing enterprises. The career focus for graduates is industrial technician and technologist positions. Students develop advanced technical skills in industrial safety, machine manufacturing, computer numerical control (CNC), materials technology, automation/robotics, electronics, computer-aided design and drafting (CADD), computer-aided design (CAD), solid modeling and quality control.

Job Options
Opportunities for employment in the field of industrial technology are diverse. Graduates find challenging and rewarding careers in all geographical areas of the United States as CAD operators, drafters, designers, engineering technicians, production technologists, safety technicians, manufacturing technicians, quality control technicians, CNC machine programmers, robotic technicians, and many other industrial and manufacturing fields. The average annual wage rate for industrial technology positions in southwestern Pennsylvania is over $58,000 per year. The Southwestern Pennsylvania Industrial Resource Center estimates that there are more than 4,100 industrial firms in the region that account for more than 196,000 manufacturing jobs. Pittsburgh was rated the top location in the country for two years in a row for factory automation equipment and service jobs.

Program Objectives
The industrial technology program provides students with experiences with technological processes that will help them understand problems they may face in industrial and manufacturing environments. Basic concepts are studied in technical foundation courses such as technical drawing, electronics, automation/robotics, machining, statics and strength of materials and industrial safety. Advanced technology in CAD programmable logic controllers (PLCs), CNC, computer-integrated manufacturing, and quality control provide a capstone of computer-assisted techniques used by modern industry to increase quality and productivity.

National Assn. of Industrial Technology
Student Club
Industrial technology students are encouraged to join the National Association of Industrial Technology Student Club. The club provides opportunities for students to enhance their technical skills and professional knowledge. Club members participate in tours of industrial facilities, attend conferences, and develop technical skills through service projects.

University Resources
Facilities for industrial technology include: CADD labs, materials testing lab, automated manufacturing center, metrology lab, and machine lab. Two CAD/Drafting Labs feature networked PC's with internet access, AutoCAD 2010©, Mechanical Desktop©, Architectural Desktop©, CADKEY 97©, Solid Works©, Catia© for engineering design and solid modeling and ANSYS© finite element analysis software. The Automated Manufacturing Center in Eberly Center has a new HAAS© VF-O CNC vertical machining center, a DAEWOOF Lynx 200© turning center, two Denford© CNC milling machines, two Denford© CNC lathes, a HAAS CNC stimulator and MasterCAM© computer-aided manufacturing software. The center also includes tabletop Scorbot© robots, Amatrol© servo-control robots, PLCs, automated materials handling conveyors, vision systems and voice recognition control systems. Computer labs in the Eberly Center contain several software packages that support various industrial technology courses in production analysis, quality control, cost estimating and project management.

ASSOCIATE OF SCIENCE:
INDUSTRIAL TECHNOLOGY — 60 CREDITS
The following eight-semester schedule of courses provides a recommended framework for completing this program of study in four years. To ensure that they are making satisfactory academic progress, students should consult with their faculty adviser, ensure that they complete necessary prerequisites and required courses in sequence and complete a minimum of 15 credits each semester.
## Freshman Year

**First Semester** ................................................................. 13 credits
- ENG 101 English Composition I ........................................ 3 crs.
- Public Speaking ................................................................... 3 crs.
- ITE 115 Interpretation of Technical Drawing .................. 3 crs.
- MAT 181 College Algebra ................................................. 3 crs.
- UNI 100 First Year Seminar ............................................. 1 crs.

**Second Semester** ............................................................. 16 credits
- ENG 217 SciTech Writing .................................................. 3 crs.
- ITE 181 Materials Technology I ....................................... 3 crs.
- ITE 215 Computer Aided Drafting I ............................... 3 crs.
- MAT 191 College Trigonometry ..................................... 3 crs.
- PHY 121 General Physics I .............................................. 4 crs.

## Sophomore Year

**Third Semester** .............................................................. 16 credits
- ITE 250 Introduction to Automation ................................ 3 crs.
- CHE 101 General Chemistry I ....................................... 4 crs.
- ITE 135 Digital Electronics ............................................. 3 crs.
- ITE 165 Machine Processing I ........................................ 3 crs.
- General Elective ............................................................. 3 crs.

**Fourth Semester** ........................................................... 15 credits
- ITE 130 Introductory Circuit Analysis ......................... 3 crs.
- ITE 236 Numerical Control Program I ....................... 3 crs.
- ITE 325 Statics and Strength of Materials ................ 3 crs.
- ITE 341 Quality Control ............................................... 3 crs.
- General Elective ............................................................. 3 crs.

## Program Contact Information
Contact the Department of Applied Engineering and Technology by phone at 724-938-4085.

## Curriculum
California University believes that a liberal education is essential for all students, regardless of the profession for which they may be preparing. The goals, objectives, and courses that comprise our General Education program are designed to provide students with the knowledge, understanding, and skill they will need to pursue their careers and lead productive and rewarding lives.

## Note
The policies and procedures described here may be reviewed and revised as the need arises. This fact sheet should be used as an information guide. For details on current policies and procedures, contact the chair of the department.