Manufacturing

EDUCATION EMPLOYMENT SYSTEM #330
PARKLAND COLLEGE

Manufacturing Production: Maintenance, Installation & Repair: Electronic Control Systems Technology

Unity High School

Career Pathway Program of Study

*This Career Pathway Program of Study (based on the Production Pathway of the Manufacturing Career Cluster) can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this program are only recommended coursework and should be individualized to meet each learner's educational and career goals. *This Program of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.*

EDUCATION LEVELS	GRADE	English/ Language Arts	Math	Science	Social Studies/ Sciences	Other Required Courses and Recommended Electives	Career and Technical Courses and/or Degree Major Courses for Manufacturing Production Pathway				Sample Occupations Relating to This Pathway
	Interest Inventory Administered and Program of Study Initiated for all Learners										
SECONDARY	9	English I	Algebra I	Integrated Science	Consumer Ed	P.E.	Introduction to Industrial Technology & Engineering				► Biomedical Equipment Technician ► Boilermaker ► Communication System Installer/Repairer ► Computer Installer/Repairer ► Computer Maintenance Technician ► Electrical Equipment Installer/Repairer ► Facility Electrician ► Industrial Electronic Installer/Repairer/ Manager ► Industrial Machinery Mechanic ► Industrial Maintenance Electrician ► Industrial Maintenance Technician/Mechanic ► Instrument Calibration and Repairer ► Instrument Control Technician ► Job/Fixture Designer ► Laser Systems Technician ► Maintenance Repairer ► Major Appliance Repairer ► Meter Installer/Repairer ► Plumber, Pipe Fitter and Steam Fitter ► Security System Installer
SECONDARY	10	English II	Geometry	Biology I	Western civilization	P.E.	Cabinetmaking & Millwork I	Cabinetmaking & Milwork II			
SECONDARY	11	English III	Algebra II		U.S. History	P.E./Health	Precision Metal Production I	Precision Metal Production II			
	College Placement Assessments-Academic/Career Advisement Provided										
SECONDARY	12	ENG 101	Math Recommended		Government	P.E./Consumer Ed.	Mechanical Drafting I	Mechanical Drafting II			
	Dual Credit Transcripted-Postsecondary courses may be taken/moved to the secondary level for articu										
POSTSECONDARY	13		MAT 124 or 134				ELT 111 Computer Apps for Technicians	ELT 131 Residential Wiring	ELT 150 Intro to Electricity & Electronics	ELT 179 Industrial Control Devices	
POSTSECONDARY	13					CSC 133 PC Hardware & OS Maintenance	ELT 134 Motors, Controls, and Drives	ELT 155 Digital Control Systems	ELT 171 Analog Control Systems	ELT 231 Programmable Controllers	
POSTSECONDARY	14	ENG 101			Social/Behavioral Science or Humanities/Fine Arts		ELT 191 Security & Home Automation	ELT 292 Process Control	ELT 299 Robitics & Automation	**Summer Class** EST 113 --Work Experience & Ethics	
POSTSECONDARY	14	COM 103 or COM 120			Social/Behavioral Science or Humanities/Fine Arts		ELT 230 Transformers & Generators	ELT 293 Industrial Control Networks	ELT 295 Modicon Automation & Control		
POSTSECONDARY	*Total Hours for Associate in Applied Science Degree = 70 hrs.*										
POSTSECONDARY	15	Continue courses in the area of specialization									
POSTSECONDARY	16	Complete Baccalaureate Manufacturing Major (4-Year Degree Program)									

Schools in Illinois with Bachelor's degree programs in Manufacturing:	Required Courses, *Recommended Course
Univerisity of Illinois at Urbana-Champaign, Illinoios State University, Northern Illinois University,	Recommended Electives
Illinois Institute of Technology, Southern Illinois University, University of Illinois at Chicago,	Available Dual Credit Courses
Bradley University, Western Illinois University, Eastern Illinois University, Northwestern University	Postsecondary Required Courses for the AAS Degree, according to student schedule