



Manufacturing

- ▶ HEALTH, SAFETY & ENVIRONMENTAL ASSURANCE
- ▶ LOGISTICS & INVENTORY CONTROL
- ▶ MAINTENANCE, INSTALLATION & REPAIR
- ▶ MANUFACTURING PRODUCTION PROCESS DEV.
- ▶ PRODUCTION
- ▶ QUALITY ASSURANCE

A career in manufacturing requires certain skills and education depending on job requirements. Skills include planning, managing, and performing the process of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Bachelor's Degree from Iowa Universities and Colleges	Sample Career	Salaries
Aerospace Engineering	Aerospace Engineer	\$112,550
Mechanical Engineering	Mechanical Engineer	\$74,100
Manufacturing Technology	Industrial Production Manager	\$96,150
Kirkwood Associate's Degree	Sample Career	Salaries
Advanced Manufacturing and Robotics Technologies	CNC Mill Operator	\$37,700
Advanced Welding Technologies	Pipefitter	\$50,200
Automation and Instrumentation Technologies	Electro-Mechanical Technician	\$55,100
CNC Machining Technology	Tool and Die Maker	\$48,200
Electronics Engineering Technology	Security System Technician	\$46,300
CAD/Mechanical Engineering Technology	Mechanical Engineering Technician	\$49,900
Energy Production and Distribution Technologies	Wind Turbine Service Technician	\$62,300
Industrial Maintenance	Electro-Mechanical Technician	\$55,100
Kirkwood Diploma	Sample Career	Salaries
Entry-Level Welding	Brazer	\$37,900
CNC Machining Technology	Machinist	\$39,000
Electronics Engineering Technology	Security System Technician	\$46,300
CAD/Mechanical Engineering Technology	Test Technician	\$40,800
HVAC Installer	Heating and Air Conditioning Mechanic	\$50,500
Electromechanical Technology	Electromechanical Assembler	\$39,500
Plumbing Pre-Apprenticeship	Plumber	\$50,200*
Kirkwood Certificates	Sample Career	Salaries
Industrial Robotics Certificate	Computer Controlled Machine Operator	\$38,300
Kirkwood Career Academies	Sample Career	Salaries
Advanced Manufacturing with Robotics & Welding	Fabricator	\$32,300
Energy, Electrical, and Automation Academy	Vending Machine Service/Repairer	\$31,650



*Information provided by Emis National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018



High School Courses

- Introduction to Architecture, Construction & Engineering
- Mechanical Drafting
- Construction Material Processing
- Metal Manufacturing
- Construction Technology
- Introduction to Engineering Design (IED)

- Principles of Engineering (POE)
- Digital Electronics (DE)
- Civil Engineering and Architecture
- Physical Science
- Physics
- Geometry
- Algebra

High School Related Activities and Clubs

- Internships
- Job Shadows