



Manufacturing Cluster

Planning, managing, and performing the processing 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.

Sample Career Specialties/Occupations	<ul style="list-style-type: none"> ◆ Assemblers ◆ Automated Manufacturing Technicians ◆ Bookbinders ◆ Calibration Technicians ◆ Electrical Installers and Repairers ◆ Electromechanical Equipment Assemblers ◆ Extruding and Drawing Machine Setters/Set-Up Operators ◆ Extrusion Machine Operators ◆ Foundry Workers ◆ Grinding, Lapping, and Buffing Machine Operators ◆ Hand Packers and Packagers ◆ Hoist and Winch Operators ◆ Instrument Makers ◆ Large Printing Press Machine Setters and Set-Up Operators ◆ Machine Operators ◆ Managers, Supervisors ◆ Medical Appliance Makers ◆ Milling Machine Setters, Set-Up Operators ◆ Millwrights ◆ Operators, Tenders, Cutters/Brazers, Soldering, Machine Operations ◆ Painters ◆ Pattern & Model Makers ◆ Precision Layout Workers ◆ Precision Optical Goods Workers ◆ Production Associates ◆ Sheet Metal Workers ◆ Solderers and Braziers ◆ Tool and Die Makers ◆ Welders 	<ul style="list-style-type: none"> ◆ Design Engineers ◆ Electrical and Electronic Technicians and Technologists ◆ Electronics Engineers ◆ Engineering and Related Technicians and Technologists ◆ Engineering Technicians ◆ Industrial Engineers ◆ Labor Relations Managers ◆ Manufacturing Engineers ◆ Manufacturing Technicians ◆ Power Generating and Reactor Plant Operators ◆ Precision Inspectors, Testers, and Graders ◆ Process Improvement Technicians ◆ Production Managers ◆ Purchasing Agents ◆ Supervisors 	<ul style="list-style-type: none"> ◆ Biomedical Equipment Technicians ◆ Boilmakers ◆ Communication System Installers/Repairers ◆ Computer Installers/Repairers ◆ Computer Maintenance Technicians ◆ Electrical Equipment Installers/Repairers ◆ Facility Electricians ◆ Industrial Electronic Installers/Repairers ◆ Industrial Facilities Managers ◆ Industrial Machinery Mechanics ◆ Industrial Maintenance Electricians ◆ Industrial Maintenance Mechanics ◆ Industrial Maintenance Technicians ◆ Instrument Calibration and Repairers ◆ Instrument Control Technicians ◆ Job/Fixture Designers ◆ Laser Systems Technicians ◆ Maintenance Repairers ◆ Major Appliance Repairers ◆ Meter Installers/Repairers ◆ Millwrights ◆ Plumbers, Pipe Fitters and Steam Fitters ◆ Security System Installers/Repairers 	<ul style="list-style-type: none"> ◆ Calibration Technicians ◆ Inspectors ◆ Lab Technicians ◆ Process Control Technicians ◆ Quality Control Technicians ◆ Quality Engineers ◆ SPC Coordinators 	<ul style="list-style-type: none"> ◆ Communications, Transportation and Utilities Managers ◆ Dispatchers ◆ Freight, Stock, and Material Movers ◆ Industrial Truck and Tractor Operators ◆ Logistical Engineers ◆ Logisticians ◆ Material Associates ◆ Material Handlers ◆ Material Movers ◆ Process Improvement Technicians ◆ Quality Control Technicians ◆ Traffic Managers ◆ Traffic, Shipping, and Receiving Clerks 	<ul style="list-style-type: none"> ◆ Environmental Engineers ◆ Environmental Specialists ◆ Health and Safety Representatives ◆ Safety Coordinators ◆ Safety Engineers ◆ Safety Team Leaders ◆ Safety Technicians
Path ways	Production	Manufacturing Production Process Development	Maintenance, Installation & Repair	Quality Assurance	Logistics & Inventory Control	Health, Safety and Environmental Assurance
Cluster K & S	<p>Cluster Knowledge and Skills</p> <ul style="list-style-type: none"> ◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology Applications ◆ Systems ◆ Safety, Health and Environmental ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities ◆ Employability and Career Development ◆ Technical Skills 					