

# CAREER PROGRAM OF STUDY



**Career Cluster:** **MANUFACTURING**

**Pathway:** *Production; Manufacturing Production Process Development; Maintenance, Installation & Repair; Quality Assurance; Logistics & Inventory Control; and Health, Safety & Environmental Assurance*

**Student Name:** \_\_\_\_\_

**Career Clusters** identify pathways from high schools to two- and four-year technical colleges, universities, graduate schools, apprenticeship programs and the workplace so that learners can recognize the relationship between what they learn in school and what they can do in the future.

**Knowledge and Skills Needed to Succeed in this Career Cluster:** Academic Foundations, Communications, Problem Solving & Critical Thinking, Information Technology Applications Systems, Safety, Health & Environmental, Leadership & Teamwork, Ethics & Legal Responsibilities, Employability & Career Development, and Technical Skills.

		9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
HIGH SCHOOL COURSES	English	<i>Core Courses</i>			
		English I English Prep 2 English Prep I	English II Basic Skills English English Prep 2 English Prep I	Adv. Comp. & Early Amer. Lit. American Literature Basic Skills English English Prep 2	AP English World Literature Adv. Comp. & Early Amer. Lit. Technical Writing Everyday English
	Social Studies	<i>Schedule a Sophomore Individual Planning Conference with your Counselor</i>			
		U.S. History	World History	Modern American History (req.) Psychology Sociology Comparative Politics Modern Global Issues	AP American History Pop Culture Microeconomics Macroeconomics
	Math	<i>Schedule College Visits &amp; College Entrance Exams for Junior Year</i>			
Algebra I Extended Algebra Geometry		Geometry Extended Geometry Algebra II	Probability & Stats Adv. Geometry Pre-Calculus FST	AP Calculus Discrete Math ACT Math Prep	
Science	<i>Schedule Senior Interview with your Counselor before October 1</i>				
	Integrated Science Biology Plant Science	Biology Chemistry Animal Science	Physics AP Chemistry AP Physics	AP Biology Food Science Animal Health & Nutrition	

CAREER ENHANCEMENT	Elective Courses Within This Cluster Include:		School Activities
	Activities in Manufacturing Materials & Process Welding Manufacturing Technology Power & Energy Electricity & Electronics	Drafting & CAD Ag Survey Environmental Conservation Intro to Microsoft Office Advanced Microsoft Office Employability Skills	Skills USA-VICA Youth Apprenticeship Band Choir

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Counselor Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# MANUFACTURING

Career Majors			
<b>Wisconsin Technical College System – 2 year</b> <a href="http://www.witechcolleges.com">www.witechcolleges.com</a>		<b>Wisconsin College/University System – 4 year</b> <a href="http://www.uwhelp.wisconsin.edu">www.uwhelp.wisconsin.edu</a> <b>Wisconsin Independent Colleges &amp; Universities</b> <a href="http://www.wisconsinmentor.org">www.wisconsinmentor.org</a>	
<b>POST SECONDARY PROGRAMS</b>	Air Conditioning, Heating & Refrigeration Technician Appliance Technician Applied Engineering Technology Automated Manufacturing Systems Technician Automated Packaging Systems Technician Automation Systems Technology Bio-Medical Electronics Chemical Technician Civil Engineering Technology CNC Programmer/Operator CNC Technician Computer Aided Mfg. Tech. Electrical Engineering Tech, Electrical Power Engineering Electricity Electro-Mechanical Technology Electron Microscopy Electronics Electronics – Computer Engine Machining Technician Engine Technology Facilities Maintenance Fluid Power Maintenance	Gas Utility Construction & Service Industrial Engineering Technician Industrial Maintenance Tech Industrial Mechanical Technician Industrial Vehicle Technician Industrial Welding Technician Instrumentation Jewelry Repair & Fabrication Machine Tool Technician Marine Repair Technician Materials Technology Mechanical Design Tech Motorcycle, Marine & Outdoor Power Products Plastics Technology Power Engineering & Boiler Operator Power Plant Mechanics Quality Assurance Technician Quality Management Structural Steel Detailing Telecommunications Technician Tool and Die Welding	Bio Medical Engineering Chemical Engineering Civil Engineering Electrical Engineering Manufacturing Engineering
	<i>Learn more about career programs at <a href="http://www.careervoyages.com">www.careervoyages.com</a></i>		



# MANUFACTURING

Specialty Careers / Occupations					
Production	Manufacturing Production Process Development	Maintenance, Installation & Repair	Quality Assurance	Logistics & Inventory Control	Health, Safety and Environmental Assurance
<p>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 &amp; Buffing Machine Operators Hand Packer/Packager Hoist and Winch Operator Instrument Makers Large Printing Press Machine Setters Set-Up Operators Machine Operators Managers, Supervisors Medical Appliance Makers Milling Machine Setters, Set-Up Operators Millwrights Operators, Tenders, Painters Pattern &amp; Model Makers Precision Layout Workers Precision Optical Goods Workers Production Associates Sheet Metal Workers Solderers and Brazers Tool and Die Makers Welders</p>	<p>Design Engineers Electrical and Electronic Technician/Technologist 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</p>	<p>Biomedical Equipment Technicians Boilermakers 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, Steam Fitters Security System Installers/Repairers</p>	<p>Calibration Technicians Inspectors Lab Technicians Process Control Techs Quality Control Technician Quality Engineers SPC Coordinators</p>	<p>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 Technician Traffic Managers Traffic, Shipping, and Receiving Clerks</p>	<p>Environmental Engineers Environmental Specialists Health and Safety Representatives Safety Coordinators Safety Engineers Safety Team Leaders Safety Technicians</p>
<p><i>Learn more about specific occupations at: <a href="http://www.bls.gov/oco/">http://www.bls.gov/oco/</a></i></p>					

SAMPLE CAREER OCCUPATIONS

