



Pathway Brief



MANUFACTURING

For incoming freshmen beginning 2020–2021

OVERVIEW

The Manufacturing Jump Start 2.0 Pathway prepares students to work in the process and production fields. Pathway coursework equips students to design, create, assemble, install, and repair electrical and mechanical systems. Students will be able to perform preventative maintenance procedures on machines, tools, and equipment on a routine and regular basis. This pathway also encompasses petrochemical courses where students will learn about the refining and processing of petroleum and/or natural gas. Manufacturing workers will be able to move into advanced manufacturing careers to use innovative technology to improve current products or processes to assist companies in producing their products more efficiently.

COLLEGE AND CAREER CONNECTIONS

Finding high-wage career opportunities directly out of high school can be challenging. It typically requires advanced capstone credentials accompanied by work experience and/or apprenticeships in the field.

High School to Career	Community/Technical College to Career	University to Career
Entry Level Warehouse Operator	Mechanical/Piping/Electrical Designer Trainee	Chemical Engineer
Instrument Technician Trainee	Instrument Technician	Mechanical Engineer
Electrical Technician Trainee	Electrical Technician	Electrical Engineer

CAPSTONE CREDENTIALS

In order to graduate, Jump Start students must earn at least one credential from the options below.

Regional (Emerging)	Basic	Advanced
Career and Technical Certificate (LCTCS)*	Certificate of Technical Studies (LCTCS)*	Technical Diploma (LCTCS)*
AutoDesk Certified User: • Fusion 360 • Rivet	ADDA Certified Mechanical Apprentice Drafter	AutoDesk Inventor Certified User
AWS Welding 1G	Autodesk Certified User AutoCAD	Carpenter International Training Fund (CITF) Career Connections, Millwright Level 1, Welding Level 2
Maritime Safety Credentials Suite: Personal Safety/Social Responsibilities, Basic Water Survival, Basic Firefighting AND Basic First Aid/CPR AED	Carpenters International Training Fund (CITF): • Welding Level 1	Electrical Training ALLIANCE Interim Credential (etA): Levels 1-5
	Certified Logistics Associate or Technician (MSSC)	NCCER Level 2 or above • Electrical • Instrumentation • Industrial Maintenance • Mechanic • Mechanical Insulating • Millwright • Mobile Crane Operations • Pipefitting • Welding
NCCER: • Basic Rigger • Helper Modules • Industrial Coating & Lining Application Specialist	Certified Production Technician (CPT) AND Certified Production Technician Plus (CPT+)	
OSHA: • OSHA 10** • OSHA 30	Electrical Training ALLIANCE Interim Credential etA): • Levels 1-3 • Level 4 • Level 5	
PEC Basic Orientation: • Safe Land • Safe Gulf	Geographic Information System - Entry Level Technician Certification	NIMS Machining Level 2 Certification
Water Survival/Helicopter Underwater Egress Training (HUET)	Louisiana Micro-Enterprise - Statewide	
	NCCER Level 1 • Electrical • Heavy Equipment Operations • Instrumentation • Industrial Maintenance • Mechanic • Mechanical Insulating • Millwright • Mobile Crane Operations • Pipefitting • Welding	
	NIMS Machining Level 1 Certification	
	North America's Building Trades Unions Multi-Craft Core Curriculum (MC3)	
	Production Safety Systems (T-2) Basic	

*Aligned to pathway.

UNIVERSAL DOCUMENTS

[CDF ELIGIBLE COURSES](#)

[JUMP START FUNDING](#)

[UNIVERSAL COURSE CODES](#)