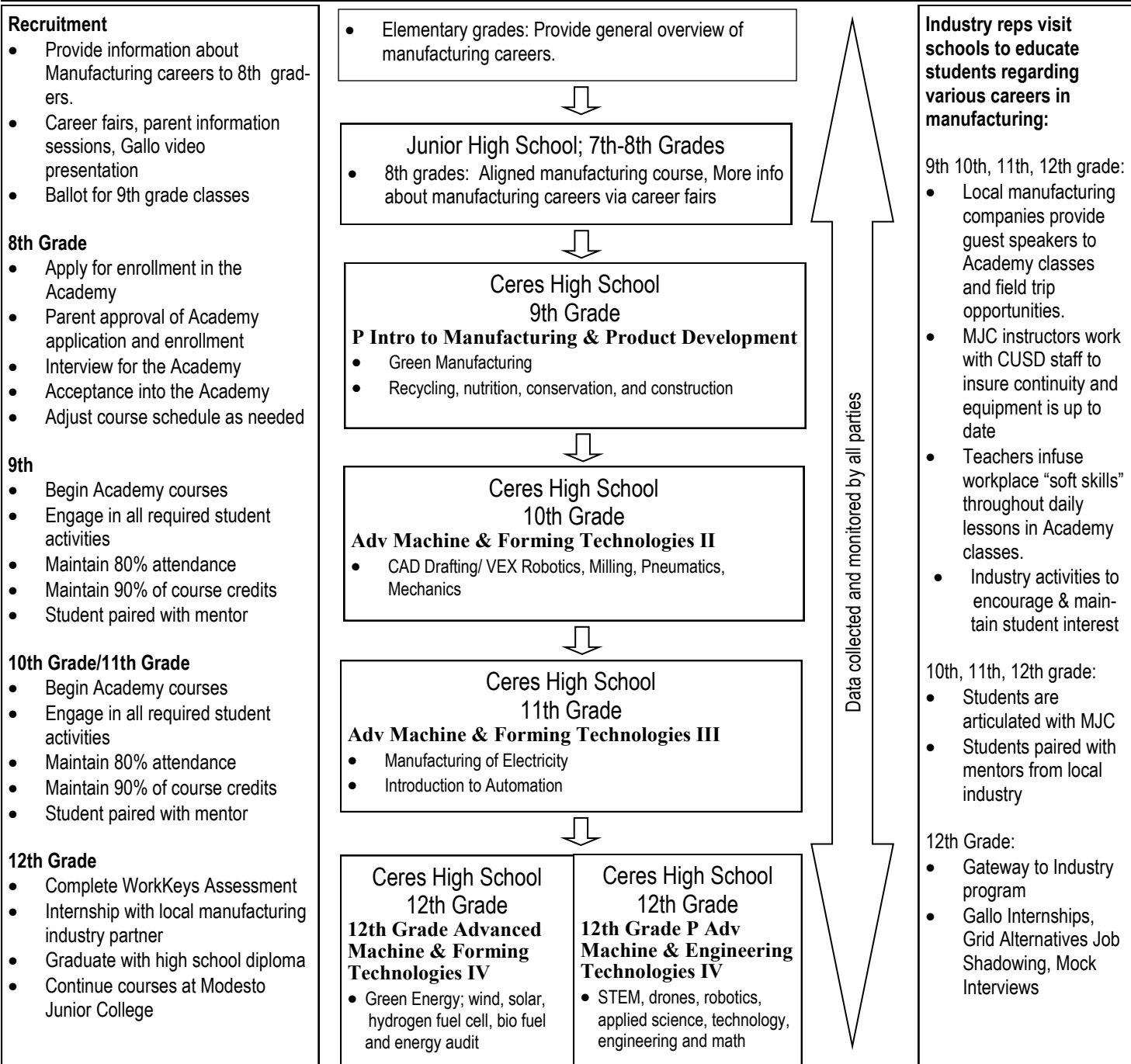


Green Manufacturing Academy Program MPGT

CTE Sector: Manufacturing and Product Development—CTE pathway: Machine and Forming Technology



Modesto Junior College

Courses leading to an A.S. Degree: Industrial Electronics

Required Courses

ELTEC 265– Troubleshooting Techniques	ELTEC 212– Digital Principals & Circuits	ELTEC 229– Commercial & Industrial
ELTEC 322– Technical Measurements	ELTEC 232– Intro to Program	ELTEC 234– Intro to PACs: Programmable
ELTEC 208– Fundamentals of Elect. & Electronics **	ELTEC 226– Motors, Controls and Controllers	Automation Controllers
ELTEC 205– Elect. Fabrication & Assembly Techn.	ELTEC 223– Industrial Elect. Components & Logic Controllers	ELTEC 321 Photovoltaic Systems **
ELTEC 300– Survey of App Technologies**	ELTEC 221– Instrumentation Devices & Systems	

Degree/Transfer to 4 year University/Employment

Program of Study Worksheet

This Program of Study should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

Industry Sector: Manufacturing & Product Development

Career Pathway: Machine & Forming Technology Pathway - CHS

Program of Study: Green and Clean Manufacturing Academy MPGT

This Program of Study is a formalized Tech Prep articulated pathway: No

LEVEL	GRA	English/ Language Arts	Math	Science	Social Studies	Career Technical Education Courses	Other Required Courses or Recommended Electives	SAMPLE Occupations Relating to this Pathway
SECONDARY	9	English 9	Int. Mathematics I or Int. Accelerated Mathematics I	Physics of the Universe or Adv Phys. of the Universe	AP Human Geography	Intro to Manufacturing & Product Development	PE Foreign Language	Occupations requiring less than a Baccalaureate Degree <ul style="list-style-type: none"> ▶ Maintenance Mechanic ▶ Electronic Technician ▶ Electronics Manufacturing ▶ CNC Machine Operator ▶ Welder/ Solderer/ Brazer Occupations requiring a Baccalaureate Degree <ul style="list-style-type: none"> ▶ Product Coordinator ▶ Computer Support Specialist (Drafting) ▶ Manufacturing Engineer ▶ Operation Manager ▶ Civil Engineer Industry recognized certification, licenses, or credentials related to this pathway <ul style="list-style-type: none"> ▶ MSSC – Certified Prod. Technician ▶ NFP70e ▶ OSHA - Forklift Safety ▶ OSHA – Safety ▶ AWS D1
	10	English 10	Int. Mathematics II or Int. Accelerated Mathematics II	Chemistry in the Earth Systems or Adv Chemistry in Earth Systems	World History or AP European History	Adv Machine & Forming Technologies II	PE Drivers Ed/Health Foreign Language	
	11	English 11	Int. Mathematics III or Int. Acc. Mathematics III or AP Statistics	Biology of The Living Earth or AP Biology	U.S. History or AP U.S. History	Adv Machine & Forming Technologies III	Foreign Language Computer Graphics I	
	12	Expository Reading & Writing	Pre-Calculus or AP Calculus or AP Statistics	AP Physics or Anatomy Physiology	Principles of Democracy or AP Government or Economics	Adv Machine & Forming Technologies IV or Adv Machine & Engineering Technologies IV	Adv Digital Photo Graphics	
POSTSECONDARY	Year 13	ELTEC 265– Troubleshooting Techniques ELTEC 322– Technical Measurements ELTEC 208– Fundamentals of Elect. & Electronics		ELTEC 212– Digital Principals & Circuits ELTEC 232– Intro to Program ELTEC 226– Motors, Controls and Controllers		ELTEC 229– Commercial & Industrial ELTEC 234– Intro to PACs: Programmable Automation Controllers		
	Year 14	ELTEC 205– Elect. Fabrication & Assembly Techniques ELTEC 320– Electrical Safety		ELTEC 223– Industrial Elect. Components & Logic Controllers ELTEC 221– Instrumentation Devices & Systems		ELTEC 321 Photovoltaic Systems		
	Year 15	ME021-01 – Engineering Computing ME137-01 - Computer Aided Engineering ME142-01 – Mechatronics		ME135-01 – Finite Element Analysis ME170-01 – Capstone Design ME202-01 – Transport Phenomena		ME 140-01 – Vibration & Control ME 144-01 – Intro to Multi Body Dynamics		
	Year 16	ME188-01 - Machine Shop Technology		ME237-01 – Radiative Heat Transfer				

