



Fort Zumwalt East High School Program of Study (POS)

Career Cluster Plan of Study (Pathways: Production, Manufacturing Production, Processing Development, Health, Safety and Environmental Assurance, Quality Assurance, Maintenance, Installation and Repair, Logistics and Inventory Control).

This Career Cluster Plan of Study can serve as a guide, along with other career planning materials, as you continue your career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. All plans should meet high school graduation requirements as well as college entrance requirements.

Grade	English 4 credits	Math 3 credits (4 recommended)	Science 3 credits	Social Studies/ Sciences 3 credits	Other Required Courses, Recommended Electives, Career & Technical Courses and/or Degree Major Courses	Additional Learning Opportunities	SAMPLE Occupations Relating to this Cluster
9	English I/ Pre-AP English I	Algebra I, Geometry Pre-AP Geom.	Physical Science, Biology, Pre-AP Biology	US History Pre-AP US Hist.	PE / Health or Fine Arts Foreign Language Intro Draft, Applied Draft, Arch Draft, Engineering Draft, PLTW Comp Sci & Soft Engineering, PLTW Intro to Engineering	Clubs: FBLA, FCCLA, DECA, Key, NHS, STUCO	<ul style="list-style-type: none"> ▶ Assembler ▶ Boilermaker ▶ Design Engineer ▶ Electronic Engineer Technician/Technologist ▶ Electronics Engineer ▶ Foundry Worker ▶ Freight, Stock and Material Mover ▶ Health/Safety Rep. ▶ Inspector ▶ Industrial Engineer ▶ Industrial Production Manager ▶ Labor Relations Manager ▶ Logistician ▶ Machine Operators, Setters, Tenders ▶ Manufacturing Engineer ▶ Manufacturing Technician ▶ Model Maker ▶ Precision Inspector, Tester, Grader ▶ Process Improvement Technician ▶ Production Agent ▶ Production Manager ▶ Purchasing Agent ▶ Quality Control Technician ▶ Safety Engineer ▶ SPC Coordinator ▶ Supervisor ▶ Tool and Diemaker ▶ Traffic Manager ▶ Welder
10	English II/ Pre-AP English II	Geometry Pre- AP Geom. Algebra II Pre-AP Alg. II	Biology Pre-AP Biology Chemistry Gen Physics Zoology Astron, Geology, Env Sci I/II	World History AP World Hist.	Personal Finance Arch and Engineering Draft (Arch area) Arch and Engineering Draft (Eng area) Collaborative Study in Engineering, PLTW Prin of Engineering	Athletics Summer Camps Job Shadow Volunteer Community Service see www.communitycouncil.org	
11	American Lit./ Pre-AP American Literature/ AP Lang	Geometry Pre-AP Geom. Algebra II Pre-AP Alg. II Algebra III Pre – AP Calc, College Algebra	Chemistry, Gen Physics Applied Bio/ Chemistry, AP Physics, AP Biology, AP Chemistry, Zoology	Govt. AP Govt AP US History	Lewis and Clark Tech: Drafting and CAD I Combination Welding I; PLTW (Engineering track)	Part-time Employment Entrepreneurship	
12	Senior Lit AP Lit AP Lang (or 2 sem classes)	Algebra II, Algebra III, College Algebra Pre- AP Calculus AP Statistics, AP Calculus AB AP Calculus BC	See 11 th grade options, Applied Bio/ Chem. II		Lewis and Clark Tech: Drafting and CAD II Combination Welding II, PLTW (engineering track)	Assessments: PSAT, ACT SAT, ASVAB MO Connections	

Post Secondary: For listing of Community Colleges, Tech Schools, and 4 year colleges: www.missouriconnections.org

Military, On-the-Job Training, Apprenticeship

If attend Lewis and Clark Tech, ask about the articulation agreements with other tech schools.



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"> ◆ Assembler ◆ Automated Manufacturing Technician ◆ Bookbinder ◆ Calibration Technician ◆ Electrical Installer and Repairer ◆ Electromechanical Equipment Assembler ◆ Extruding and Drawing Machine Setter/Set-Up Operator ◆ Extrusion Machine Operator ◆ Foundry Worker ◆ Grinding, Lapping, and Buffing Machine Operator ◆ Hand Packers and Packager ◆ Hoist and Winch Operator ◆ Instrument Maker ◆ Large Printing Press Machine Setter and Set-Up Operator ◆ Machine Operator ◆ Manager, Supervisor ◆ Medical Appliance Maker ◆ Milling Machine Setter, Set-Up Operator ◆ Millwright ◆ Operator, Tender, Cutter/Brazer, Solderer, Machine Operator ◆ Painter ◆ Pattern & Model Maker ◆ Precision Layout Worker ◆ Precision Optical Goods Worker ◆ Production Associate ◆ Sheet Metal Worker ◆ Solderer and Brazer ◆ Tool and Die Maker ◆ Welder 	<ul style="list-style-type: none"> ◆ Design Engineer ◆ Electrical and Electronics Technician and Technologist ◆ Electronics Engineer ◆ Engineering and Related Technician and Technologist ◆ Engineering Technician ◆ Industrial Engineer ◆ Labor Relations Manager ◆ Manufacturing Engineer ◆ Manufacturing Technician ◆ Power Generating and Reactor Plant Operator ◆ Precision Inspector, Tester, and Grader ◆ Process Improvement Technician ◆ Production Manager ◆ Purchasing Agent ◆ Supervisor 	<ul style="list-style-type: none"> ◆ Biomedical Equipment Technician ◆ Boilermaker ◆ Communication System Installer/Repairer ◆ Computer Installer/Repairer ◆ Computer Maintenance Technician ◆ Electrical Equipment Installer/Repairer ◆ Facility Electrician ◆ Industrial Electronic Installer/Repairer ◆ Industrial Facilities Manager ◆ Industrial Machinery Mechanic ◆ Industrial Maintenance Electrician ◆ Industrial Maintenance Mechanic ◆ Industrial Maintenance Technician ◆ Instrument Calibration and Repairer ◆ Instrument Control Technician ◆ Job/Fixture Designer ◆ Laser Systems Technician ◆ Maintenance Repairer ◆ Major Appliance Repairer ◆ Meter Installer/Repairer ◆ Millwright ◆ Plumber, Pipefitter and Steamfitter ◆ Security System Installer/Repairer 	<ul style="list-style-type: none"> ◆ Calibration Technician ◆ Inspector ◆ Lab Technician ◆ Process Control Technician ◆ Quality Control Technician ◆ Quality Engineer ◆ SPC Coordinator 	<ul style="list-style-type: none"> ◆ Communications, Transportation and Utilities Manager ◆ Dispatcher ◆ Freight, Stock, and Material Mover ◆ Industrial Truck and Tractor Operator ◆ Logistical Engineer ◆ Logistician ◆ Material Associate ◆ Material Handler ◆ Material Mover ◆ Process Improvement Technician ◆ Quality Control Technician ◆ Traffic Manager ◆ Traffic, Shipping, and Receiving Clerk 	<ul style="list-style-type: none"> ◆ Environmental Engineer ◆ Environmental Specialist ◆ Health and Safety Representative ◆ Safety Coordinator ◆ Safety Engineer ◆ Safety Team Leader ◆ Safety Technician
	Pathways	Production	Manufacturing Production Process Development	Maintenance, Installation & Repair	Quality Assurance	Logistics & Inventory Control
Cluster R & 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 Environment ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities ◆ Employability and Career Development ◆ Technical Skills 					



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www.careerclusters.org