



Engineering

(Project Lead the Way)

STEM ENDORSEMENT

DHS, SHS and WHS

2024-25

Grade	CTE Required Courses	Language Arts	Math	Science	Social Studies	Required State Electives
9th	Introduction to Engineering Design (PLTW) (1)	English I	Algebra I	Biology		Fine Arts (1) Health (.5) Languages Other Than English (LOTE) or Computer Science PE (1 or substitute credit)
10th	Engineering Science (PLTW) (1)	English II	Geometry	Chemistry	World Geography or World History	
11th	Digital Electronics (PLTW) (1) Robotics I (1)	English III	Algebra II	Physics or Principles of Technology	U.S. History	
12th	Engineering Design and Development (PLTW) (1) Civil Engineering and Architecture (PLTW) (1)	English IV or Business English (1)	Engineering Mathematics (1) Robotics II (1)	Select from approved Advanced Science courses	Government/ Economics	

High School/ Industry Certifications/Performance Acknowledgements	
State Approved	District Approved
Autodesk Associate (Certified User) AutoCAD, Autodesk Associate (Certified User) Fusion 360, Autodesk Associate (Certified User) Inventor for Mechanical Design, Autodesk Associate (Certified User) Revit Architecture, Autodesk Associate (Certified User) Revit for Electrical, Pre-Engineering/Engineering Technology - Job Ready	Six Sigma, OSHA 10 General
Career & Technical Student Organizations: Skills USA, TSA	

Certificate/ License*	Associate's Degree	Bachelor's Degree	Master's/ Doctoral Professional Degree
Engineer, Professional	Electrical and Electronics Engineering	Electrical and Electronics Engineering	Electrical and Electronics Engineering
Fluid Power Systems Designer	Drafting and Design Technology/ Technician, General	CAD/CADD Drafting and/or Design Technology/ Technician	Mechanical Engineering
Certified Biomedical Auditor	Engineering Technology	Bioengineering and Biomedical Engineering	Bioengineering and Biomedical Engineering

Occupations	Median Wage	Annual Openings	% Growth
Aerospace Engineers	\$110,843	481	9%
Industrial Engineers	\$97,074	1,263	10%
Mechanical Engineers	\$91,107	1,535	11%
Chemical Engineers	\$112,819	474	9%
Electrical Engineers	\$98,405	1,137	10%

The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing, scientific research and professional and technical services, including laboratory and testing services, and research and development services.