



Precision Metal Engineering and Manufacturing Engineering

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Course Description

Precision Metal Engineering and Manufacturing Engineering are a courses designed to familiarize students with the knowledge, skills, and career opportunities in the manufacturing industry. Emphasis is placed on technical and practical applications of manual mills, manual lathe, CNC mills, CNC lathes, CNC plasma cutter, 3D printing, laser engraving, robotics and automation, mechatronics, industrial motor control, saws and a variety of tools and processes. Students will also gain the skills to read and produce shop drawings, structural drawings, blueprints, manufacture production prototypes, and design and program a manufacturing robotic automation line.

Certifications and Licensing

Solidworks CSWA Certification- (Precision Metal Engineering students)	TBD
Seimens CNC Level 1 Certification- (Precision Metal Engineering students)	TBD
National Institute for Metalworking Skills Credentials- (Manufacturing Engineering students)	\$35.00
Seimens CNC Level 2 Certification- (Manufacturing Engineering students)	TBD

Materials and Fees

Certification Materials Testing Fee	\$75.00
HCTC polo shirt (Required by the first day of school)	\$20.00
2 Pairs of tan khaki pants (provided by student); (Can be purchased at Walmart)	
Leather work boots (provided by student); (Can be purchased at Walmart)	
2 Pairs of clear safety glasses (provided by student)	
Optional Fees- subject to change	
Student organization dues (Skills USA Membership)	TBD
Skills USA Competition Fee	TBD
Class T-Shirt	\$10.00

All fees are required to be paid in full by the first day of school. Payment plans are available.

Polo shirt and khaki pants are required dress for field trips, special events, and peer professional day.

Uniforms, work boots and safety glasses are required on the first day of school.

Transportation

EMS ISD provides daily transportation between HCTC and the home campuses. Students may drive personal vehicles to and from HCTC with a signed parent/guardian transportation form and a proof of automobile insurance on file at HCTC. HCTC will issue no-cost parking passes after receiving both items. Students are not allowed to transport other students during the school day.

It is the policy of the Eagle Mountain-Saginaw ISD not to discriminate on the basis of race, color, national origin, gender, or handicap in its Career and Technology Education programs, services, or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended. Eagle Mountain-Saginaw ISD will take steps to assure the lack of English language skills will not be a barrier to admission and participation in all educational and Career and Technology Education programs.

Es norma de Eagle Mountain-Saginaw Independent School District no discriminar por motivos de raza, color, origen nacional, sexo o impedimento, en sus programas, servicios o actividades vocacionales, tal como lo requieren el Título VI de la Ley de Derechos Civiles de 1964, según enmienda; el Título IX de las Enmiendas en la Educación, de 1972, y la Sección 504 de la Ley de Rehabilitación de 1973, según enmienda. Eagle Mountain-Saginaw Independent School District tomará las medidas necesarias para asegurar que la falta de habilidad en el uso de la lengua inglés no sea un obstaculo para la admisión y participación en todos los programas educativos y vocacionales.