



Principles of Applied Engineering and Tech.

<b>Level 1</b>	Invention and Innovation FIRST focus (PAET)
<b>Level 2</b>	Engineering Design & Presentation (3D CAD) Robotics I - FIRST focus
<b>Level 3</b>	Robotics II
<b>Level 4</b>	Career Preparation I - TLC

HIGH SCHOOL/INDUSTRY CERTIFICATION	CERTIFICATE/LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/DOCTORAL PROFESSIONAL DEGREE
FANUC Robot Operator 1	Engineer, Professional	Electro-mechanical Engineering/Technology	Electrical Engineering	Electrical Engineering
Mastercam Associate Level Certification	Certified Quality Technician	Certified Quality Technician	Industrial Engineering	Industrial Engineering
NCCER Industrial Maintenance Mechanic	Plant Maintenance Technologist	Industrial Mechanics and Maintenance Technology	Mechanical Engineering	Mechanical Engineering
NIMS Industrial Technology Maintenance - Maintenance Operations				

Occupations	Median Wage	Annual Openings	% Growth
Electro-Mechanical Assemblers	\$30,160	951	9%
Electro-Mechanical Technicians	\$56,555	127	9%
Industrial Machinery Mechanics	\$49,816	3,788	27%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES	
<b>Exploration Activities:</b>	<b>Work Based Learning Activities:</b>
Participate in SkillsUSA and local STEM events	Apprenticeship at a local business or industry American Welding Society

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

The Advanced Manufacturing and Machinery Mechanics program of study focuses on the assembly, operation, maintenance, and repair of electromechanical equipment or devices. CTE learners may work in a variety of mechanical fields, gaining knowledge and experience in robotics, refinery and pipeline systems, deep ocean exploration, or hazardous waste removal. CTE concentrators may work in a variety of fields of engineering.



The Manufacturing Career Cluster focuses on 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.

Successful completion of the Advanced Manufacturing and Machinery program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met. Revised - July 2020

# COURSE INFORMATION

FOR ADDITIONAL INFORMATION ON THE MANUFACTURING CAREER CLUSTER, PLEASE CONTACT:

Jennifer Bullock | Jennifer.Bullock@tea.texas.gov

<https://tea.texas.gov/cte>

Eanes ISD offers career and technical education programs in Arts, A/V Technology and Communications; Business, Management and Administration; Education and Training; Human Development, Management and Services; Health Science; Information Technology, Marketing and STEM. Admission to these programs is based on interest and aptitude, age appropriateness, and class space available.

It is the policy of the Eanes Independent School District not to discriminate on the basis of race, color, national origin, sex, or handicap in its vocational 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; the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973, as amended. Eanes ISD will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs. For information about your rights or grievance procedures, contact the following persons are designated to handle inquiries regarding non-discrimination policies:

- Title II, Section 504: Assistant Superintendent of CIA, Molly May, [mmay@eanesisd.net](mailto:mmay@eanesisd.net) (512) 732-9021.
- Title IX and Age Act of 1975: Assistant Superintendent for Human Resources, Laurie Lee, [lee@eanesisd.net](mailto:lee@eanesisd.net), (512) 732-9010. at EISD Central Administration, 601 Camp Craft Rd., Austin, TX, 78746.

## **Declaración de la Práctica de No Discriminar**

La práctica de Eanes Independent School District es de no discriminar ya sea por raza, color, origen nacional, sexo, discapacidad, ni edad de la persona al emplear o para proporcionar educación, admisión, trato, o acceso a los beneficios de servicios educativos, actividades, y programas. Las siguientes personas han sido designadas para responder a preguntas tocantes las prácticas para evitar la discriminación:

La Ley del Título II y Sección 504 (Title II and Section 504): Director de Educación Especial, Molly May, [mmay@eanesisd.net](mailto:mmay@eanesisd.net), (512) 732-9021

La Ley del Título IX y Discriminación Tocante la Edad de 1975 (Title IX and Age Discrimination Act of 1975): Asistente al Superintendente en Recursos Humanos, Laurie Lee, [lee@eanesisd.net](mailto:lee@eanesisd.net), (512) 732-9010

Ambos tienen sus oficinas en EISD Central Administration, 601 Camp Craft Rd., Austin, TX, 78746.