



Level 1	
Level 2	Robotics I
Level 3	Robotics II
Level 4	Career Preparation I

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
	Engineer, Professional	Electro- mechanical Engineering/ Technology	Electrical Engineering	Electrical Engineering
	Certified Quality Technician	Certified Quality Technician	Industrial Engineering	Industrial Engineering
	Plant Maintenance Technologist	Industrial Mechanics and Maintenance Technology	Mechanical Engineering	Mechanical Engineering

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%

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 .

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
Participate in SkillsUSA and local events	Apprenticeship at a local business or industry American Welding Society

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 endorsement. To complete the Advanced Manufacturing and Machinery POS, you must complete three or more courses for four or more credits, including one level three or level four course within the same program of study. Revised - July 2020



COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITS (PREQ) COREQUISITES (CREQ)	Grade
Robotics I	13037000 (1 credit)	None	9-10
Robotics II	13037050 (1 credit)	PREQ: Robotics I	10-12
Career Preparation I	12701300 (2 credits)	None	11-12

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

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

The Big Spring Independent School District offers career and technical education programs in Family and Consumer Sciences, Trade and Industrial Education, Business Education Career Preparation, and Industrial Technology Education. Admission to these programs is based on interest, aptitude, age appropriateness, and class space available. It is the policy of the Big Spring Independent School District not to discriminate on the basis of race, color, national origin, sex, or handicap in its career and technology 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. It is the policy of Big Spring Independent School District not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices 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. The Big Spring Independent School District 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 Title IX and/or the Section 504 Coordinator, at Big Spring I.S.D., Administrative Offices, 708 11th Place, Big Spring, Texas 79720, Phone Number (432) 264-3600.