

# CTE Programs of Study

## Business & Industry Endorsement

Completes three (3) or more courses for four (4) or more credits with at least one (1) Level 3 or 4 course.



### BUSINESS & INDUSTRY ENDORSEMENT

CAREER CLUSTER	PROGRAM OF STUDY	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	INDUSTRY BASED CERTIFICATIONS
Agriculture, Food & Natural Resources	<b>Agriculture Business, Leadership &amp; Communications</b>	<b>7000</b> Principles of Agriculture, Food, and Natural Resources (1 cr.) <b>7208</b> College and Career Readiness—Professional Communications (.5 cr.)	<b>7015</b> Professional Standards and Communication in Agribusiness (1 cr.) <b>7379</b> Entrepreneurship (1 cr.)	<b>7496</b> Independent Study Mentorship (1 cr.)	<b>7090</b> Practicum in Agriculture, Food and Natural Resources (2 cr.)	
	<b>Animal Science</b>	<b>7000</b> Principles of Agriculture, Food, and Natural Resources (1 cr.)	<b>7010</b> Small Animal Management (.5 cr.) <b>7379</b> Entrepreneurship (1 cr.)	<b>7018</b> Livestock Production (1 cr.) <b>7020</b> Veterinary Science (1 cr.)	<b>7021</b> Advanced Animal Science (1 cr.) <b>7090</b> Practicum in Agriculture, Food, and Natural Resources (2 cr.) <b>7096</b> Practicum in Veterinary Science (2 cr.) <b>7496</b> Independent Study Mentorship (1 cr.)	Certified Veterinary Assistant, Level 1 Elanco Fundamentals of Animal Science Elanco Veterinary Medical Applications
	<b>Agricultural Technology &amp; Mechanical Systems</b>	<b>7000</b> Principles of Agriculture, Food, and Natural Resources (1 cr.)	<b>7070</b> Agricultural Mechanics and Metal Technologies (1 cr.)	<b>7072/L</b> Agricultural Structures Design and Fabrications/Lab (1 or 2 cr.)	<b>7090</b> Practicum in Agriculture, Food, and Natural Resources (2 cr.) <b>7496</b> Independent Study Mentorship (1 cr.)	AWS D9.1 Sheet Metal
	<b>Environmental &amp; Natural Resources</b>	<b>7000</b> Principles of Agriculture, Food, and Natural Resources (1 cr.)	<b>7017</b> Wildlife, Fisheries, and Ecology Management (1 cr.)	<b>7496</b> Independent Study Mentorship (1 cr.)	<b>7090</b> Practicum in Agriculture, Food, and Natural Resources (2 cr.)	
	<b>Food Science &amp; Technology</b>	----	<b>7000</b> Principles of Agriculture, Food, and Natural Resources (1 cr.)	<b>7620</b> Food Science (1 cr.)	<b>7090</b> Practicum in Agriculture, Food, and Natural Resources (2 cr.) <b>7496</b> Independent Study Mentorship (1 cr.)	
	<b>Plant Science</b>	<b>7000</b> Principles of Agriculture, Food, and Natural Resources (1 cr.)	<b>7379</b> Entrepreneurship (1 cr.)	<b>7030</b> Floral Design (1 cr.) <b>7033</b> Horticulture Science (1 cr.)	<b>7090</b> Practicum in Agriculture, Food, and Natural Resources (2 cr.) <b>7496</b> Independent Study Mentorship (1 cr.)	Texas State Florists' Association Knowledge Based Floral Certification Texas State Florists' Association Level 1 Floral Certification
	<b>Carpentry</b>	<b>7145</b> Principles of Construction (1 cr.)	<b>7146</b> Construction Technology-Design and Carpentry (2 cr.) <b>7379</b> Entrepreneurship (1 cr.)	<b>7147</b> Construction Technology-Architecture and Electrical (2 cr.)	<b>7148</b> Practicum in Construction Technology (2 cr.)	NCCER Carpentry Level I NCCER Core
Arts, A/V Technology & Communication	<b>Graphic Design &amp; Interactive Media</b>	<b>7201</b> Digital Media (1 cr.)	<b>7241</b> Graphic Design and Illustration I (1 cr.) <b>7231</b> Animation I (1 cr.) <b>7228</b> Commercial Photography (1 cr.) <b>7240</b> Fashion Design I (1 cr.) <b>7930</b> Game Programming and Design (1 cr.) <b>7379</b> Entrepreneurship (1 cr.)	----	<b>7243</b> Graphic Design and Illustration II (1 cr.) <b>7233</b> Animation II (1 cr.) <b>7245</b> Fashion Design II (1 cr.)	Content Creation & Marketing using Adobe Express
	<b>Digital Communications</b>	<b>7208</b> College and Career Readiness—Professional Communications (.5 cr.)	<b>7225</b> Audio/Video Production I (1 cr.) <b>7379</b> Entrepreneurship (1 cr.)	<b>7226</b> Audio/Video Production II/Lab (2 cr.) <b>7229</b> Audio/Video Production II/Lab (1 cr.)	<b>7227/L</b> Practicum in Audio/Video Production/Extended (2 or 3 cr.)	

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Business, Marketing & Finance	<b>Accounting &amp; Financial Services</b>	<b>7300</b> Principles of Business, Marketing and Finance (1 cr.)	<b>7321</b> Foundations of Business Communication and Technologies (1 cr.)  <b>7341</b> Accounting I (1 cr.)  <b>7344</b> Financial Mathematics (1 cr.)  <b>7379</b> Entrepreneurship (1 cr.)	<b>7342</b> Accounting II (1 cr.)	<b>7331</b> Practicum in Small Business Management I (2 cr.)	
	<b>Business Management</b>	<b>7300</b> Principles of Business, Marketing and Finance (1 cr.)	<b>7321</b> Foundations of Business Communication and Technologies (1 cr.)  <b>7379</b> Entrepreneurship (1 cr.)	<b>7331</b> Practicum in Small Business Management I (2 cr.)	<b>7332</b> Practicum in Small Business Management II (2 cr.)	Entrepreneurship & Small Business
	<b>Entrepreneurship</b>	<b>7300</b> Principles of Business, Marketing and Finance (1 cr.)	<b>7321</b> Foundations of Business Communication and Technologies (1 cr.)  <b>7379</b> Entrepreneurship (1 cr.)	<b>7331</b> Practicum in Small Business Management I (2 cr.)	<b>7332</b> Practicum in Small Business Management II (2 cr.)  <b>7496</b> Independent Study Mentorship (1 cr.)	Entrepreneurship & Small Business
	<b>Marketing &amp; Sales</b>	<b>7300</b> Principles of Business, Marketing and Finance (1 cr.)  <b>7201</b> Digital Media (1 cr.)	<b>7350</b> Sports and Entertainment Marketing (.5 cr.)  <b>7379</b> Entrepreneurship (1 cr.)	----	<b>7375</b> Social Media Marketing (.5 cr.)	Content Creation & Marketing using Adobe Express
	<b>Retail Management</b>	----	<b>7300</b> Principles of Business, Marketing and Finance (1 cr.)	<b>7331</b> Practicum in Small Business Management I (2 cr.)	<b>7332</b> Practicum in Small Business Management II (2 cr.)	Entrepreneurship & Small Business
Engineering	<b>Engineering Foundations</b>	<b>7904</b> Principles of Applied Engineering (1 cr.) (STREAM SCI)  <b>7900</b> Engineering Design Process (1 cr.)	<b>7975</b> Robotics I (1 cr.)  <b>7921</b> Aerospace Design (1 cr.)	<b>7911</b> Digital Electronics (1 cr.)  <b>7920</b> Architectural and Civil Engineering (1 cr.)  <b>7910</b> Engineering Science (1 cr.)	<b>7940</b> Engineering Design and Problem Solving (1 cr.)  <b>7976</b> Practicum in Robotics (2 cr.)  <b>7496</b> Independent Study Mentorship (1 cr.)	
	<b>Mechanical &amp; Aerospace Engineering</b>	<b>7904</b> Principles of Applied Engineering (1 cr.) (STREAM SCI)  <b>7900</b> Engineering Design Process (1 cr.)	<b>7921</b> Aerospace Design (1 cr.)	<b>7910</b> Engineering Science (1 cr.)	<b>7940</b> Engineering Design and Problem Solving (1 cr.)  <b>7496</b> Independent Study Mentorship (1 cr.)	
	<b>Electrical Engineering</b>	<b>7904</b> Principles of Applied Engineering (1 cr.) (STREAM SCI)  <b>7900</b> Engineering Design Process (1 cr.)	<b>7975</b> Robotics I (1 cr.)	<b>7911</b> Digital Electronics (1 cr.)  <b>7910</b> Engineering Science (1 cr.)	<b>7940</b> Engineering Design and Problem Solving (1 cr.)  <b>7976</b> Practicum in Robotics (2 cr.)  <b>7496</b> Independent Study Mentorship (1 cr.)	
Hospitality & Tourism	<b>Culinary Arts</b>	<b>7608</b> Introduction to Culinary Arts (1 cr.)	<b>7621</b> Culinary Arts (2 cr.)  <b>7379</b> Entrepreneurship (1 cr.)	<b>7622</b> Advanced Culinary Arts (2 cr.)	<b>7620</b> Food Science (1 cr.)  <b>7690</b> Practicum in Culinary Arts (2 cr.)	Food Protection Manager Certification

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## Business & Industry Endorsement

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### BUSINESS & INDUSTRY ENDORSEMENT

CAREER CLUSTER	PROGRAM OF STUDY	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	INDUSTRY BASED CERTIFICATIONS
Human Services	<b>Cosmetology &amp; Personal Care Services</b>	----	<b>7763</b> Introduction to Cosmetology (concurrent enrollment in 7763L Cosmetology I) (1 cr.) <b>7379</b> Entrepreneurship (1 cr.)	<b>7763L</b> Cosmetology I (concurrent enrollment in 7763 Introduction to Cosmetology) (2 cr.)	<b>7765</b> Cosmetology II (3 cr.)	Cosmetology Operator License
		Information Technology	<b>Information Technology Support &amp; Services</b>	<b>7931</b> Fundamentals of Computer Science (1 cr.)	<b>7410</b> Computer Maintenance (1 cr.) <b>7379</b> Entrepreneurship (1 cr.)	<b>7420</b> Computer Technician (2 cr.)
<b>Cybersecurity</b>	<b>7931</b> Fundamentals of Computer Science (1 cr.) <b>7937</b> Foundations of Cybersecurity (1 cr.)		<b>7410</b> Computer Maintenance (1 cr.) <b>7932P</b> AP Computer Science Principles (1 cr.)	<b>7933P</b> AP Computer Science A (1 cr.)	<b>7431</b> Practicum in Computer Technician (2 cr.) <b>7935H</b> Independent Study: Computer Science (1 cr.) <b>7496</b> Independent Study Mentorship (1 cr.)	CompTIA Tech+ CompTIA Network+ CompTIA A+ CompTIA Security+ Certified Entry-Level JavaScript Programmer
<b>Networking Systems</b>	<b>7931</b> Fundamentals of Computer Science (1 cr.)		<b>7410</b> Computer Maintenance (1 cr.) <b>7932P</b> AP Computer Science Principles (1 cr.) <b>7379</b> Entrepreneurship (1 cr.)	<b>7496</b> Independent Study Mentorship (1 cr.)	<b>7431</b> Practicum in Computer Technician (2 cr.)	CompTIA Tech+ CompTIA Network+ CompTIA A+
<b>Programming &amp; Software Development</b>	<b>7931</b> Fundamentals of Computer Science (1 cr.)		<b>7930</b> Game Programming and Design (1 cr.) <b>7932P</b> AP Computer Science Principles (1 cr.) <b>7379</b> Entrepreneurship (1 cr.)	<b>7933P</b> AP Computer Science A (1 cr.)	<b>7935H</b> Independent Study: Computer Science (1 cr.) <b>7496</b> Independent Study Mentorship (1 cr.)	Certified Entry-Level JavaScript Programmer Certified Entry-Level Python Programmer (PCEP) Java SE Java Certified Foundations Associate
Manufacturing	<b>Manufacturing Technology</b>	----	<b>7159</b> Principles of Manufacturing (1 cr.)	<b>7161</b> Precision Metal Manufacturing I (2 cr.)	<b>7162</b> Precision Metal Manufacturing II (2 cr.)	NCCER Core
	<b>Welding</b>	<b>7169</b> Introduction to Welding (concurrent enrollment in 7170 Welding I) (1 cr.)	<b>7170</b> Welding I (concurrent enrollment in 7169 Introduction to Welding) (2 cr.) <b>7379</b> Entrepreneurship (1 cr.)	----	<b>7171</b> Welding II (2 cr.)	AWS D1.1 Structural Steel AWS D9.1 Sheet Metal AWS Certified Welder
Transportation, Distribution & Logistics	<b>Automotive &amp; Collision Repair</b>	----	<b>7379</b> Entrepreneurship (1 cr.)	<b>7811</b> Automotive Technology I (2 cr.)	<b>7812</b> Automotive Technology II (2 cr.) <b>7890</b> Practicum in Transportation Systems (2 cr.)	Various ASE Entry-Level Automobile Certifications

# CTE Programs of Study

## Public Services Endorsement

Completes three (3) or more courses for four (4) or more credits with at least one (1) Level 3 or 4 course.



### PUBLIC SERVICES ENDORSEMENT

CAREER CLUSTER	PROGRAM OF STUDY	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	INDUSTRY BASED CERTIFICATIONS
Education & Training	<b>Early Learning</b>	<b>7709</b> Principles of Education and Training (1 cr.)	<b>7713</b> Child Development (1 cr.)	<b>7721</b> Child Guidance I (2 cr.)	<b>7723</b> Child Guidance II (2 cr.) <b>7496</b> Independent Study Mentorship (1 cr.)	Pre-Professional Certification in Early Childhood Educational Aide I
	<b>Teaching &amp; Training</b>	<b>7709</b> Principles of Education and Training (1 cr.)	<b>7713</b> Child Development (1 cr.)	<b>7711</b> Teacher Education Training I (2 cr.)	<b>7712</b> Teacher Education Training II (2 cr.) <b>7496</b> Independent Study Mentorship (1 cr.)	Educational Aide I
Health Science	<b>Exercise Science, Wellness, &amp; Restoration</b>	<b>7580</b> Principles of Allied Health (1 cr.) (STREAM VLI) <b>7501</b> Principles of Health Science (1 cr.)	<b>7511</b> Medical Terminology (1 cr.) <b>7750</b> Interpersonal Studies (.5 cr.) <b>7500</b> Lifetime Nutrition and Wellness (.5 cr.) <b>7379</b> Entrepreneurship (1 cr.)	<b>7550/H</b> Anatomy and Physiology (1 cr.)	<b>7496</b> Independent Study Mentorship (1 cr.)	
	<b>Diagnostic &amp; Therapeutic Services</b>	<b>7580</b> Principles of Allied Health (1 cr.) (STREAM VLI) <b>7501</b> Principles of Health Science (1 cr.)	<b>7511</b> Medical Terminology (1 cr.)	<b>7507</b> Patient Care Technician (1 cr.) <b>7550/H</b> Anatomy and Physiology (1 cr.)	<b>7530</b> Pathophysiology (1 cr.) <b>7504</b> Pharmacy Technician (2 cr.) <b>7560</b> Dentistry Practicum in Health Science (2 cr.)	Patient Care Technician Pharmacy Technician Registered Dental Assistant
	<b>Biomedical Science</b>	<b>7501</b> Principles of Health Science (1 cr.) <b>7570</b> Principles of Biomedical Science (1 cr.)	<b>7511</b> Medical Terminology (1 cr.) <b>7571</b> Human Body Systems (1 cr.) <b>7964</b> Biotechnology I (1 cr.)	<b>7572</b> Medical Interventions (1 cr.) <b>7965</b> Biotechnology II (1 cr.) <b>7550/H</b> Anatomy and Physiology (1 cr.)	<b>7530</b> Pathophysiology (1 cr.) <b>7990</b> Practicum in Biotechnology (2 cr.) <b>7496</b> Independent Study Mentorship (1 cr.)	
	<b>Nursing Science</b>	<b>7501</b> Principles of Health Science (1 cr.)	<b>7511</b> Medical Terminology (1 cr.)	<b>7507</b> Patient Care Technician (1 cr.) <b>7550/H</b> Anatomy and Physiology (1 cr.)	<b>7530</b> Pathophysiology (1 cr.) <b>7508</b> Certified Nursing Assistant-Practicum in Nursing (2 cr.)	Patient Care Technician Certified Nursing Assistant
Human Services	<b>Health &amp; Wellness</b>	<b>7340</b> Dollars and Sense (.5 cr.)	<b>7750</b> Interpersonal Studies (.5 cr.) <b>7500</b> Lifetime Nutrition and Wellness (.5 cr.) <b>7713</b> Child Development (1 cr.) <b>7379</b> Entrepreneurship (1 cr.)	----	<b>7620</b> Food Science (1 cr.)	

# CTE Programs of Study

## Science, Technology, Engineering & Math Endorsement

Completes three (3) or more courses for four (4) or more credits with at least one (1) Level 3 or 4 course.



### SCIENCE, TECHNOLOGY, ENGINEERING & MATH ENDORSEMENT

CAREER CLUSTER	PROGRAM OF STUDY	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	INDUSTRY BASED CERTIFICATIONS
Engineering	<b>Engineering Foundations</b>	<b>7904</b> Principles of Applied Engineering (1 cr.) (STREAM SCI)  <b>7900</b> Engineering Design Process (1 cr.)	<b>7975</b> Robotics I (1 cr.)  <b>7921</b> Aerospace Design (1 cr.)	<b>7911</b> Digital Electronics (1 cr.)  <b>7920</b> Architectural and Civil Engineering (1 cr.)  <b>7910</b> Engineering Science (1 cr.)	<b>7940</b> Engineering Design and Problem Solving (1 cr.)  <b>7976</b> Practicum in Robotics (2 cr.)  <b>7496</b> Independent Study Mentorship (1 cr.)	
	<b>Mechanical &amp; Aerospace Engineering</b>	<b>7904</b> Principles of Applied Engineering (1 cr.) (STREAM SCI)  <b>7900</b> Engineering Design Process (1 cr.)	<b>7921</b> Aerospace Design (1 cr.)	<b>7910</b> Engineering Science (1 cr.)	<b>7940</b> Engineering Design and Problem Solving (1 cr.)  <b>7496</b> Independent Study Mentorship (1 cr.)	
	<b>Electrical Engineering</b>	<b>7904</b> Principles of Applied Engineering (1 cr.) (STREAM SCI)  <b>7900</b> Engineering Design Process (1 cr.)	<b>7975</b> Robotics I (1 cr.)	<b>7911</b> Digital Electronics (1 cr.)  <b>7910</b> Engineering Science (1 cr.)	<b>7940</b> Engineering Design and Problem Solving (1 cr.)  <b>7976</b> Practicum in Robotics (2 cr.)  <b>7496</b> Independent Study Mentorship (1 cr.)	
Health Science	<b>Biomedical Science</b>	<b>7501</b> Principles of Health Science (1 cr.)  <b>7570</b> Principles of Biomedical Science (1 cr.)	<b>7511</b> Medical Terminology (1 cr.)  <b>7571</b> Human Body Systems (1 cr.)  <b>7964</b> Biotechnology I (1 cr.)	<b>7572</b> Medical Interventions (1 cr.)  <b>7965</b> Biotechnology II (1 cr.)  <b>7550/H</b> Anatomy and Physiology (1 cr.)	<b>7530</b> Pathophysiology (1 cr.)  <b>7990</b> Practicum in Biotechnology (2 cr.)  <b>7496</b> Independent Study Mentorship (1 cr.)	
	<b>Nursing Science</b>	<b>7501</b> Principles of Health Science (1 cr.)	<b>7511</b> Medical Terminology (1 cr.)	<b>7507</b> Patient Care Technician (1 cr.)  <b>7550/H</b> Anatomy and Physiology (1 cr.)	<b>7530</b> Pathophysiology (1 cr.)  <b>7508</b> Certified Nursing Assistant-Practicum in Nursing (2 cr.)	Patient Care Technician Certified Nursing Assistant
Information Technology	<b>Cybersecurity</b>	<b>7931</b> Fundamentals of Computer Science (1 cr.)  <b>7937</b> Foundations of Cybersecurity (1 cr.)	<b>7410</b> Computer Maintenance (1 cr.)  <b>7932P</b> AP Computer Science Principles (1 cr.)	<b>7933P</b> AP Computer Science A (1 cr.)	<b>7431</b> Practicum in Computer Technician (2 cr.)  <b>7935H</b> IS: Computer Science (1 cr.)  <b>7496</b> Independent Study Mentorship (1 cr.)	CompTIA Tech+ CompTIA Network + CompTIA A+ CompTIA Security+ Certified Entry-Level Java Script Programmer
	<b>Networking Systems</b>	<b>7931</b> Fundamentals of Computer Science (1 cr.)	<b>7410</b> Computer Maintenance (1 cr.)  <b>7932P</b> AP Computer Science Principles (1 cr.)  <b>7379</b> Entrepreneurship (1 cr.)	<b>7496</b> Independent Study Mentorship (1 cr.)	<b>7431</b> Practicum in Computer Technician (2 cr.)	CompTIA Tech+ CompTIA Network + CompTIA A+
	<b>Programming &amp; Software Development</b>	<b>7931</b> Fundamentals of Computer Science (1 cr.)	<b>7930</b> Game Programming and Design (1 cr.)  <b>7932P</b> AP Computer Science Principles (1 cr.)  <b>7379</b> Entrepreneurship (1 cr.)	<b>7933P</b> AP Computer Science A (1 cr.)	<b>7935H</b> Independent Study: Computer Science (1 cr.)  <b>7496</b> Independent Study Mentorship (1 cr.)	Certified Entry-Level Java Script Programmer Certified Entry-Level Python Programmer (PCEP) Java SE Java Certified Foundations Associate