

CTE Certification Requirements Adopted June 2010

ASSIGNMENTS	GRADES 9-12
*Career Preparation I and II and All Practicum Courses	*The school district is responsible for ensuring that each teacher assigned to this course has completed appropriate training in state and federal requirements regarding work-based learning and safety. This requirement is effective beginning with the 2010-2011 school year.
*New Math or Science Credit CTE Courses	*All teachers assigned to this course shall participate in Texas Education Agency (TEA)-approved training prior to teaching this course effective with the 2012-2013 school year. Teachers assigned to this course in the 2010-2011 and/or 2011-2012 school year will have 12 months from the date the training is first offered to complete the TEA-approved training requirements. In addition, teachers must also meet the Highly Qualified Requirements under NCLB. This federal requirement is in addition to the state requirement above.
CAREER DEVELOPMENT	
Career Preparation I*	Any career and technical education certificate
Career Preparation II*	
Problems and Solutions	
AGRICULTURE, FOOD, & NATURAL RESOURCES	
Principles of Agriculture, Food, and Natural Resources	Any agriculture certificate
Livestock Production	
Small Animal Management	
Equine Science	
Veterinary Medical Applications	
Professional Standards in Agribusiness	
Advanced Environmental Technology	
Food Technology and Safety	
Food Processing	
Wildlife, Fisheries, and Ecology Management	
Range Ecology and Management	
Forestry and Woodland Ecosystems	
Landscape Design and Turf Grass Management	
Horticulture Science	
Practicum in Agriculture, Food, and Natural Resources*	

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AGRICULTURE, FOOD, & NATURAL RESOURCES (Cont.)	
Advanced Animal Science*	Any agriculture certificate
Advanced Plant and Soil Science*	Any secondary biology certificate
	Any secondary science or science composite certificate
	Life Science: Grades 8-12
	Master Science Teacher (Grades 8-12)
	Science: Grades 8-12
Agribusiness Management and Marketing	Any agriculture certificate
	Any secondary business or office education certificate
	Any marketing or distributive education certificate
	Business Education: Grades 6-12
	Marketing Education: Grades 8-12
Mathematical Applications in Agriculture, Food, and Natural Resources*	Any agriculture certificate
	Any secondary mathematics certificate
	Master Mathematics Teacher (Grades 8-12)
	Mathematics: Grades 8-12
	Mathematics/Physical Science/Engineering: Grades 8-12
	Physics/Mathematics: Grades 8-12
Energy and Natural Resources Technology	Any agriculture certificate
Agricultural Mechanics and Metal Technologies	Any Technology Education, Industrial Technology, or Industrial Arts certificate
Agricultural Power Systems	Trade and Industrial Education: Grades 8-12 with appropriate work approval
Agricultural Facilities Design and Fabrication	Vocational Trades and Industry with appropriate work approval
Principles and Elements of Floral Design	Any agriculture certificate
	Any all-level art certificate
	Any secondary art certificate
	Art: Early Childhood-Grade12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval

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ARCHITECTURE AND CONSTRUCTION	
Principles of Architecture and Construction	Any home economics certificate
	Any Technology Education or Industrial Technology certificate
	Family and Consumer Sciences, Composite: Grades 6-12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
	Mathematics/Physical Science/Engineering: Grades 8-12
Interior Design	Any home economics certificate
Advanced Interior Design	Family and Consumer Sciences, Composite: Grades 6-12
Practicum in Interior Design*	
Architectural Design	Any Technology Education, Industrial Technology, or Industrial Arts certificate
Advanced Architectural Design	Mathematics/Physical Science/Engineering: Grades 8-12
Practicum in Architectural Design*	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Construction Management	Any agriculture certificate
Advanced Construction Management	Any Technology Education, Industrial Technology, or Industrial Arts certificate
Construction Technology	Mathematics/Physical Science/Engineering: Grades 8-12
Advanced Construction Technology	Trade and Industrial Education: Grades 8-12 with appropriate work approval
Practicum in Construction Management*	Vocational Trades and Industry with appropriate work approval
Building Maintenance Technology	Any agriculture certificate
Advanced Building Maintenance Technology	Any Technology education, Industrial Technology, or Industrial Arts certificate
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Mill and Cabinetmaking Technology	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Electrical Technology	Trade and Industrial Education: Grades 8-12 with appropriate work approval
Advanced Electrical Technology	Vocational Trades and Industry with appropriate work approval
HVAC and Refrigeration Technology	
Advanced HVAC and Refrigeration Technology	
Piping and Plumbing Technology	
Advanced Piping and Plumbing Technology	

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ARTS, AUDIO VIDEO TECHNOLOGY, AND COMMUNICATIONS	
Professional Communications	Any career and technical education certificate with six semester credit hours in speech and a baccalaureate degree
	Any secondary or all-level speech certificate
	Any secondary English language arts certificate with six semester credit hours in speech
	Mathematics/Physical Science/Engineering: Grades 8-12 with six semester credit hours in speech
	Speech: Grades 8-12
	Speech: Grades 7-12
Principles of Arts, Audio Video Technology, and Communications	Any business or office education certificate
	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Animation	Any business or office education certificate
Advanced Animation	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Technology Applications: Grades 8-12
	Technology Applications: Early Childhood-Grade 12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Audio Video Production	Any Technology Education, Industrial Technology, or Industrial Arts certificate
Advanced Audio Video Production	Technology Applications: Grades 8-12
Graphic Design and Illustration	Technology Applications: Early Childhood-Grade 12
Advanced Graphic Design and Illustration	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval

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ARTS, AUDIO VIDEO TECHNOLOGY, AND COMMUNICATIONS (cont.)	
Practicum in Audio Video Production*	Any Technology Education, Industrial Technology, or Industrial Arts certificate
Practicum in Graphic Design and Illustration*	Trade and Industrial Education: Grades 8-12 with appropriate work approval
Commercial Photography	Vocational Trades and Industry with appropriate work approval
Advanced Commercial Photography	
Printing and Imaging Technology	Trade and Industrial Education: Grades 8-12 with appropriate work approval
Advanced Printing and Imaging Technology	Vocational Trades and Industry with appropriate work approval
Practicum in Printing and Imaging Technology*	
Fashion Design	Any home economics certificate
Advanced Fashion Design	Family and Consumer Sciences, Composite: Grades 6-12
Practicum in Fashion Design*	

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BUSINESS MANAGEMENT AND ADMINISTRATION	
Touch System Data Entry	Any business or office education certificate
Business Information Management I	Business Education: Grades 6-12
Business Information Management II	
Business Law	
Practicum in Business Management*	
Principles of Business, Marketing, and Finance	Any business or office education certificate
Global Business	Any marketing or distributive education certificate
Human Resources Management	Business Education: Grades 6-12
Virtual Business	Marketing Education: Grades 8-12
Business Management	
Business English	Any business or office education certificate
	Any secondary English or English Language Arts certificate
	Business Education: Grades 6-12
	English Language Arts and Reading: Grades 8-12

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FINANCE	
Banking and Financial Services	Any business or office education certificate Any marketing or distributive education certificate Business Education: Grades 6-12 Marketing Education: Grades 8-12
Money Matters	Any business or office education certificate Any home economics certificate Any marketing or distributive education certificate Business Education: Grades 6-12 Family and Consumer Science, Composite: Grades 6-12 Marketing Education: Grades 8-12
Securities and Investments	Any business or office education certificate
Insurance Operations	Business Education: Grades 6-12
Accounting I	
Accounting II	
Financial Analysis	
Statistics and Risk Management*	Any business or office education certificate Any secondary mathematics certificate Business Education: Grades 6-12 Master Mathematics Teacher (Grades 8-12) Mathematics: Grades 8-12 Mathematics/Physical Science/Engineering: Grades 8-12 Physics/Mathematics: Grades 8-12

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EDUCATION AND TRAINING	
Principles of Education and Training	Any home economic certificate
Instructional Practices in Education and Training	Family and Consumer Sciences, Composite: Grades 6-12
Practicum in Education and Training*	Human Development and Family Studies: Grades 8-12
Human Growth and Development	Any home economics certificate
	Family and Consumer Sciences, Composite: Grades 6-12
	Health Science Technology
	Health Science Technology Education: Grades 8-12
	Human Development and Family Studies: Grades 8-12
	Vocational Health Occupations

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GOVERNMENT AND PUBLIC ADMINISTRATION	
Political Science I	Any secondary government or political science certificate
Political Science II	Any secondary social studies or social science certificate
Public Management and Administration	Social Studies: Grades 8-12
Planning and Governance	
Foreign Service and Diplomacy	
Principles of Government and Public Administration	Any secondary social studies or social science certificate
Practicum in Local, State, and Federal Government*	Social Studies: Grades 8-12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
	Any business or office education certificate
Revenue, Taxation, and Regulation	Any secondary social studies or social science certificate
	Business Education: Grades 6-12
	Social Studies: Grades 8-12
National Security	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval

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HEALTH SCIENCE	
Principles of Health Science	Health Science Technology
Medical Terminology	Health Science Technology Education: Grades 8-12
Health Science	Vocational Health Occupations
Practicum in Health Science*	
World Health Research	
Anatomy and Physiology	Any secondary biology certificate
Medical Microbiology	Any secondary science or science composite certificate
Pathophysiology	Health Science Technology
	Health Science Technology Education: Grades 8-12
	Life Science: Grades 8-12
	Master Science Teacher (Grades 8-12)
	Science: Grades 8-12
	Vocational Health Occupations

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HOSPITALITY AND TOURISM	
Principles of Hospitality and Tourism	Any home economics certificate
Hotel Management	Any marketing or distributive education certificate
Restaurant Management	Family and Consumer Sciences, Composite: Grades 6-12
Travel and Tourism Management	Hospitality, Nutrition, and Food Sciences: Grades 8-12
	Marketing Education: Grades 8-12
Culinary Arts	Any home economics certificate
Practicum in Culinary Arts*	Family and Consumer Sciences, Composite: Grades 6-12
	Hospitality, Nutrition, and Food Sciences: Grades 8-12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Hospitality Services	Any home economics certificate
Practicum in Hospitality and Tourism*	Any marketing or distributive education certificate
	Family and Consumer Sciences, Composite: Grades 6-12
	Hospitality, Nutrition, and Food Sciences: Grades 8-12
	Marketing Education: Grades 8-12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Food Science*	Any home economics certificate
	Any secondary biology certificate
	Any secondary chemistry certificate
	Any secondary science or science composite certificate
	Chemistry: Grades 8-12
	Family and Consumer Sciences, Composite: Grades 6-12
	Hospitality, Nutrition, and Food Sciences: Grades 8-12
	Life Science: Grades 8-12
	Master Science Teacher (Grades 8-12)
	Science: Grades 8-12

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HUMAN SERVICES	
Principles of Human Services	Any home economics certificate
Interpersonal Studies	Family and Consumer Sciences, Composite: Grades 6-12
Child Development	Human Development and Family Studies: Grades 8-12
Child Guidance	
Family and Community Services	
Practicum in Human Services*	
Lifetime Nutrition and Wellness	Any home economics certificate
	Family and Consumer Sciences, Composite: Grades 6-12
	Health Science Technology
	Health Science Technology Education: Grades 8-12
	Hospitality, Nutrition, and Food Sciences: Grades 8-12
	Vocational Health Occupations
Counseling and Mental Health	Any home economics certificate
	Family and Consumer Sciences, Composite: Grades 6-12
	Health Science Technology
	Health Science Technology Education: Grades 8-12
	Human Development and Family Studies: Grades 8-12
	Vocational Health Occupations
Dollars and Sense	Any business or office education certificate
	Any home economics certificate
	Any marketing or distributive education certificate
	Business Education: Grades 6-12
	Family and Consumer Sciences, Composite: Grades 6-12
	Human Development and Family Studies: Grades 8-12
	Marketing Education: Grades 8-12
Introduction to Cosmetology	Trade and Industrial Education: Grades 8-12 with appropriate work approval
Cosmetology I	Vocational Trades and Industry with appropriate work approval
Cosmetology II	Plus:
	Current license as a cosmetology instructor issued by the Texas Department of Licensure and Regulation

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INFORMATION TECHNOLOGY	
Principles of Information Technology	Any business or office education certificate
Telecommunications and Networking	Any Technology Education, Industrial Technology, or Industrial Arts certificate
Research in Information Technology Solutions	Business Education: Grades 6-12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Digital and Interactive Media	Any business or office education certificate
Web Technologies	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Business Education: Grades 6-12
	Technology Applications: Grades 8-12
	Technology Applications: Early Childhood-Grade 12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Computer Programming	Any business or office education certificate
Advanced Computer Programming	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Business Education: Grades 6-12
	Computer Science: Grades 8-12
	Secondary Computer Information Systems (Grades 6-12)
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Computer Maintenance	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Computer Technician	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Technology Applications: Grades 8-12
	Technology Applications: Grades Early Childhood-12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval

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LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY	
Principles of Law, Public Safety, Corrections, and Security	Trade and Industrial Education: Grades 8-12 with appropriate work approval
Law Enforcement I	Vocational Trades and Industry with appropriate work approval
Law Enforcement II	
Court Systems and Practices	
Correctional Services	
Security Services	
Firefighter I	
Firefighter II	
Practicum in Law, Public, Safety, Corrections and Security*	
Forensic Science*	Any secondary biology certificate
	Any secondary chemistry certificate
	Any secondary science or science composite certificate
	Chemistry: Grades 8-12
	Health Science Technology
	Health Science Technology Education: Grades 8-12
	Life Science: Grades 8-12
	Master Science Teacher (Grades 8-12)
	Science: Grades 8-12
	Trade and Industrial Education: Grades 8-12 with a baccalaureate degree and appropriate work approval
	Vocational Trades and Industry with a baccalaureate degree and appropriate work approval
	Vocational Health Occupations with a baccalaureate degree

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MANUFACTURING	
Principles of Manufacturing	Any Technology Education, Industrial Technology, or Industrial Arts certificate
Precision Metal Manufacturing	Mathematics/Physical Science/Engineering: Grades 8-12
Advanced Precision Metal Manufacturing	Trade and Industrial Education: Grades 8-12 with appropriate work approval
Flexible Manufacturing	Vocational Trades and Industry with appropriate work approval
Advanced Flexible Manufacturing	
Manufacturing Engineering	
Practicum in Manufacturing*	
Welding	Any agriculture certificate
Advanced Welding	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval

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MARKETING	
Sports and Entertainment Marketing	Any marketing or distributive education certificate
Marketing Dynamics	Marketing Education: Grades 8-12
Practicum in Marketing Dynamics*	
Advertising and Sales Promotion	Any marketing or distributive education certificate
	Marketing Education: Grades 8-12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Fashion Marketing	Any home economics certificate
	Any marketing or distributive education certificate
	Family and Consumer Science, Composite: Grades 6-12
	Marketing Education: Grades 8-12
Entrepreneurship	Any career and technical education certificate
Retailing and E-tailing	Any business or office education certificate
	Any marketing or distributive education certificate
	Any home economics certificate
	Business Education: Grades 6-12
	Family and Consumer Science, Composite: Grades 6-12
	Hospitality, Nutrition, and Food Sciences: Grades 8-12
	Marketing Education: Grades 8-12

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SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS	
Concepts of Engineering and Technology	Any agriculture certificate
	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Health Science Technology
	Health Science Technology Education: Grades 8-12
	Mathematics/Physical Science/Engineering: Grades 8-12
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Health Occupations
	Vocational Trades and Industry with appropriate work approval
Biotechnology	Any agriculture certificate
	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Health Science Technology
	Health Science Technology Education: Grades 8-12
	Mathematics/Physical Science/Engineering: Grades 8-12
	Vocational Health Occupations
Advanced Biotechnology*	Any agriculture certificate
	Any secondary biology certificate
	Any secondary science or science composite certificate
	Health Science Technology
	Health Science Technology Education: Grades 8-12
	Life Science: Grades 8-12
	Master Science Teacher (Grades 8-12)
	Science: Grades 8-12
	Vocational Health Occupations with a baccalaureate degree
Engineering Design and Presentation	Any Technology Education, Industrial Technology, or Industrial Arts certificate
Advanced Engineering Design and Presentation	Mathematics/Physical Science/Engineering: Grades 8-12
Practicum in Science, Technology, Engineering, and Mathematics*	
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval

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SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (cont.)	
Engineering Mathematics*	Any secondary mathematics certificate
	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Master Mathematics Teacher (Grades 8-12)
	Mathematics: Grades 8-12
	Mathematics/Physical Science/Engineering: Grades 8-12
	Physics/Mathematics: Grades 8-12
Electronics	Any Technology Education, Industrial Technology, or Industrial Arts certificate
Advanced Electronics	Mathematics/Physical Science/Engineering: Grades 8-12
Robotics and Automation	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval
Principles of Technology*	Any secondary physics certificate
Engineering Design and Problem Solving**	Any secondary science or science composite certificate
	Any Technology Education, Industrial Technology, or Industrial Arts certificate
	Master Science Teacher (Grades 8-12)
	Mathematics/Physical Science/Engineering: Grades 8-12
	Physical Science: Grades 8-12
	Physics/Mathematics: Grades 8-12
	Science: Grades 8-12
	*May also be taught with a vocational agriculture certificate or a trades and industry certificate with verifiable physics applications experience in business and industry, if assigned prior to the 1998-99 school year. Six semester credit hours of college physics, chemistry, or electricity/electronics may be substituted for the business and industry experience.
	All teachers assigned to Principles of Technology shall participate in Texas Education Agency-approved training and have eight semester credit hours in physics prior to teaching this course. At the discretion of the employing school district, persons assigned to Principles of Technology prior to the 2010-2011 school year may continue under the previous criteria.
Scientific Research and Design	Any career and technical education certificate with a baccalaureate degree and 18 semester credit hours in any combination of sciences
	Any science certificate valid for Grades 8-12
	Any secondary science teaching field
	Master Science Teacher (Grades 8-12)

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TRANSPORTATION, DISTRIBUTION, AND LOGISTICS	
Principles of Transportation, Distribution, and Logistics	Any Technology Education, Industrial Technology, or Industrial Arts certificate
Energy, Power, and Transportation Systems	Trade and Industrial Education: Grades 8-12 with appropriate work approval
Transportation Systems Management	Vocational Trades and Industry with appropriate work approval
Logistics, Planning, and Management Systems	
Practicum in Transportation, Distribution, and Logistics*	
Aircraft Technology	Trade and Industrial Education: Grades 8-12 with appropriate work approval
Advanced Aircraft Technology	Vocational Trades and Industry with appropriate work approval
Automotive Technology	
Advanced Automotive Technology	
Collision Repair and Refinishing	
Advanced Collision Repair and Refinishing	
Engine Technology	Any agriculture certificate
Advanced Engine Technology	Any Technology Education, Industrial technology, or Industrial Arts certificate
	Trade and Industrial Education: Grades 8-12 with appropriate work approval
	Vocational Trades and Industry with appropriate work approval