

**TExES® Pedagogy and Professional Responsibilities for Trade and Industrial Education 6–12
 Curriculum Crosswalk**

Required Course Numbers											
Test Content Categories											
Domain I – Designing Instruction and Assessment to Promote Student Learning											
Competency 001: <i>The trade and industrial education teacher understands human developmental processes and uses this knowledge to plan instruction and assessments that motivate students and are responsive to their developmental characteristics and needs.</i>											
A. Recognizes the wide range of individual developmental differences that characterizes students in grades 6 through 12 and the implications of this developmental variation for instructional planning.											
B. Recognizes the importance of helping students in grades 6 through 12 learn and apply employability skills (e.g., self-direction, decision making, goal setting, workplace skills, problem solving) to promote lifelong learning and active participation in society.											
C. Recognizes typical challenges for students during adolescence and young adulthood (e.g., self-esteem, physical appearance, eating disorders, identity formation, involvement in risky behaviors, educational and career decisions) and knows effective ways to help students address these challenges.											

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D. Knows social and emotional factors affecting students in grades 6 through 12 (e.g., desire for peer acceptance, conformity to peer group norms and expectations, parental divorce, homelessness) and their significance for teaching and learning.											
E. Uses knowledge of cognitive changes in students in grades 6 through 12 (e.g., refinement of abstract thinking and reasoning, reflective thinking, focus on the world beyond the school setting) to plan instruction that promotes learning and development.											
F. Analyzes how developmental characteristics of students in grades 6 through 12 affect learning and performance and applies knowledge of students' developmental characteristics and needs to plan effective learning experiences and assessments.											
Competency 002: <i>The trade and industrial education teacher understands student diversity and knows how to plan learning experiences and design assessments that are responsive to differences among students and that promote all students' learning.</i>											
A. Demonstrates knowledge of the diverse personal and social characteristics of students (e.g., related to ethnicity, gender, language background, socio-economic background, exceptionality, learning preferences) and the significance of student diversity for teaching, learning and assessment.											

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B. Knows how to show acceptance of and respect for students with diverse backgrounds and needs.											
C. Knows strategies for enhancing one's own understanding of students' diverse backgrounds and needs.											
D. Knows how to plan and adapt lessons that are responsive to students' diverse backgrounds, skills, interests and needs, including the needs of English-language learners and students with disabilities.											
E. Understands the instructional significance of varied student learning needs and preferences.											
<i>Competency 003: The trade and industrial education teacher understands learning processes and applies procedures for designing effective, coherent and engaging instruction and assessment.</i>											
A. Analyzes the effects of various factors (e.g., teacher expectations, student grouping practices, teacher-student interactions, teacher and student roles during instruction) on student learning.											
B. Knows pedagogical practices that promote learning (e.g., delivering content that capitalizes on students' prior knowledge, skills, and experiences; connecting new information and ideas to prior knowledge; making learning meaningful and relevant to students).											

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C. Knows the importance of self-directed learning and plans instruction and assessment that promote students' motivation and their sense of ownership of and responsibility for their own learning.											
D. Knows how to incorporate students' varying approaches to learning (e.g., auditory, visual, tactile, kinesthetic) into instructional practice.											
E. Understands the role of the state knowledge and skills standards (e.g., Texas Essential Knowledge and Skills [TEKS], State of Texas Assessments of Academic Readiness (STAAR®) in determining instructional goals and objectives and is able to incorporate into the curriculum the TEKS for trade and industrial education.											
F. Knows the importance of integrating academic subjects into trade and industrial education and making connections across disciplines.											
G. Knows how to develop a program vision and instructional goals with objectives that are clear, relevant and assessed according to industry standards.											
H. Knows the importance of aligning instructional goals (e.g., campus, district, state, federal) with current industry standards and integrating all aspects of the industry into the trade and industrial education curriculum.											

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I. Uses assessment to analyze students' strengths and needs, evaluate teacher effectiveness and guide instructional planning.											
J. Understands the connection among various components of the Texas statewide assessment program (e.g., STAAR®) and instruction (e.g., TEKS) and analyzes data from state and other assessments (e.g., Texas Academic Performance Reports [TAPR]) to help identify students' strengths and needs.											
K. Knows how to locate, develop and use materials and resources (including technological and industry resources) to prepare instruction, present lessons, assess student learning and evaluate the appropriateness of specific materials and resources for particular situations, purposes and student needs.											
L. Knows how to conduct an occupational or task analysis and validate it with a local advisory committee.											
M. Knows how to plan activities that utilize flexible groupings enabling students to apply knowledge in a variety of contextual activities (e.g., interpreting technical data, solving industry-related problems).											
N. Applies skills for allocating time appropriately within lessons and units, including providing adequate opportunities for students to engage in reflection, self-assessment and closure.											

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O. Knows how to plan lessons and structure units that progress sequentially, support stated instructional goals based on the TEKS and are based on industry standards and procedures.											
Domain II – Creating a Positive, Productive Learning Environment											
<i>Competency 004: The trade and industrial education teacher knows how to establish a safe, positive climate that fosters learning, equity and excellence.</i>											
A. Knows how to create a learning environment in which diversity and individual differences are respected and uses strategies to ensure that classroom interactions are polite, respectful and professional.											
B. Applies strategies for establishing a positive classroom climate that fosters student collaboration and active engagement in learning.											
C. Analyzes ways in which teacher-student and student-student interactions have an impact on classroom climate and student learning and development.											
D. Knows how to present instruction in ways that communicate enthusiasm for learning.											
E. Establishes instructional goals, tasks, interactions, assessments and other elements of the classroom and laboratory environment that convey high expectations for all students and meet industry standards.											

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F. Recognizes the need to assure physical accessibility for all students and knows how to monitor physical accessibility in the classroom, laboratory settings and work-based learning environments.											
Competency 005: <i>The trade and industrial education teacher implements strategies for creating an organized and productive learning environment and for managing student behavior.</i>											
A. Analyzes the effects of classroom management and laboratory procedures on student learning and achievement.											
B. Knows how to implement routines and procedures that promote an organized and productive learning environment.											
C. Organizes and manages individual and group activities that promote students' ability to assume responsible roles and develop collaborative skills and individual accountability applicable to industrial practice.											
D. Knows how to use flexible grouping to facilitate cooperation and productivity.											
E. Understands the importance of time management for effective classroom functioning, schedules activities to maximize student learning and safety and coordinates the performance of noninstructional duties (e.g., taking attendance) with instructional activities.											
F. Applies routines and procedures for the safe and effective management of instructional resources.											

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G. Knows the importance of establishing standards of student conduct in the classroom, laboratory settings and work-based learning environments with clear consequences for inappropriate behavior.											
H. Applies knowledge of effective discipline-management techniques in the classroom, laboratory settings and work-based learning environments.											
I. Communicates and implements classroom rules and procedures to promote an effective learning environment.											
J. Applies procedures for instructing students on how to maintain ethical work-based standards and monitor their own behavior.											
Domain III – Implementing Effective, Responsive Instruction and Assessment											
<i>Competency 006: The trade and industrial education teacher knows how to communicate effectively in various instructional contexts and provide instruction that actively engages students in the learning process.</i>											
A. Applies principles and strategies for communicating effectively in various teaching and learning contexts, including laboratory settings and work-based environments.											
B. Uses language, including occupational terminology, that is appropriate to students' backgrounds, technical skill levels and work experience.											

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C. Knows how to engage all students in skilled questioning to facilitate effective student discussions, including student-led discussions and instructor-led small-group discussions.											
D. Uses effective communication techniques to enable students to meet specified goals in various contexts and to communicate directions, explanations and procedures clearly and accurately with an appropriate level of detail.											
E. Knows how to use constructive feedback to guide student learning.											
F. Applies knowledge of factors that affect student motivation and uses strategies that encourage self-motivation, creativity and active engagement in learning.											
G. Knows how to use effective interpersonal skills (including both verbal and nonverbal skills) to actively engage students.											
H. Selects and uses instructional materials, resources and technologies that are suitable for specified instructional goals and that actively engage all students.											
I. Applies alternative instructional approaches (e.g., structuring and pacing lessons in response to student learning needs, flexible groupings) to ensure that all students learn and succeed.											
J. Presents content to students in ways that are relevant and meaningful to students' prior knowledge and experience.											

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K. Engages in continuous monitoring of instructional effectiveness and modifies instruction as needed (e.g., encouraging independent study, work-based learning, cooperative learning, management of learning activities) to promote student learning.											
Competency 007: <i>The trade and industrial education teacher understands work-based learning approaches and incorporates relevant experiences into the trade and industrial curriculum (TEKS).</i>											
A. Knows the connections between classroom learning and work-based learning experiences.											
B. Knows various work-based learning models, including mentoring, job shadowing, career preparation co-op experiences, internships or externships and capstone experiences.											
C. Knows education and training requirements associated with various career concentrations in architecture, construction and manufacturing and how to comply with the requirements of work-based training.											
D. Identifies and evaluates work-based performance standards to meet individual needs and to develop individualized training plans for paid and unpaid work-based learning experiences.											
E. Matches work-based learning activities with student needs and goals.											
F. Applies instructional strategies associated with work-based models.											

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G. Evaluates student progress based on work-based standards.											
H. Assists students in making the transition from program completion to employment and/or higher education (e.g., employment opportunities, career preparation requirements, career development resources, career concentrations).											
I. Knows the importance of collecting student follow-up data and analyzes the data to determine program effectiveness.											
Competency 008: <i>The trade and industrial education teacher understands and integrates relevant technology in delivering the trade and industrial curriculum (TEKS).</i>											
A. Uses technology to enhance instructional delivery to create an effective teaching and learning environment.											
B. Uses technology applications to promote students' knowledge and skill development and to assess student learning.											
C. Applies procedures for using productivity tools in various instructional and administrative contexts (e.g., communication, calendars).											
D. Uses computer-mediated equipment and software for individualized instruction.											
E. Knows how to use technology resources to generate knowledge.											
F. Applies procedures for evaluating information acquired electronically.											

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G. Uses technology for career guidance (e.g., assessing for interest, aptitude and abilities; career decision making).											
H. Knows how to develop and use technology plans and associated budgets.											
I. Applies knowledge of technology-related laws, issues and ethics relevant to trade and industrial curriculum and instruction.											
<i>Competency 009: The trade and industrial education teacher monitors student performance and achievement and provides students with timely, high-quality feedback and responsive instruction to promote learning for all students.</i>											
A. Knows types of cognitive- and performance-based assessments and their characteristics and usage.											
B. Knows how to design and use cognitive- and performance-based assessments of student knowledge and skills and adjusts instruction based on these assessments.											
C. Uses appropriate language and formats to enhance student learning by providing students with timely, effective feedback that is accurate, constructive and specific.											
D. Recognizes the benefits of student self-assessment and knows how to promote students' ability to use feedback to guide and enhance their own learning.											
E. Modifies instruction based on ongoing cognitive- and performance-based assessments of student knowledge and skills.											

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Competency 010: <i>The trade and industrial education teacher understands and fosters the development of entrepreneurial, employability and safety skills through delivery of the trade and industrial curriculum (TEKS).</i>											
A. Knows the basic procedures for establishing and organizing a business (e.g., conducting a market analysis and developing a business plan) and the resources needed for business start-ups and financing.											
B. Knows basic organizational structures for businesses, including state and federal laws and regulations related to operating a business, and knows common practices and procedures used in business (e.g., inventory control, hiring, and termination procedures).											
C. Knows systems and processes used to deliver goods and services and knows how to identify, serve and maintain internal and external customers.											
D. Applies knowledge of employability skills (e.g., organization, time management, professional ethics, hygiene, appearance), analyzes the importance of specific employability skills for various career concentrations and knows the characteristics of a value-added employee (e.g., employability skills, specific technical skills).											

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E. Knows how to model employability skills, infuse employability skills into the trade and industrial curriculum and assess students' proficiency in relation to employability skills.											
F. Understands the value of human diversity in relation to employment.											
G. Knows how to develop and implement a local safety plan for classroom, laboratory and work-based learning settings that complies with local, state and federal rules and regulations.											
H. Applies knowledge of relevant safety practices and teacher liability issues in the classroom, laboratory settings and work-based learning environments.											
I. Applies knowledge of local, state and federal safety regulations (e.g., OSHA and EPA regulations, hazmat safety, child labor laws, wage and hour laws) to provide a safe learning environment for students.											

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Domain IV — Fulfilling Professional Roles and Responsibilities											
Competency 011: <i>The trade and industrial education teacher understands the role of internal and external partnerships and develops and maintains collaborative relationships with educational partners to deliver the trade and industrial curriculum (TEKS).</i>											
A. Knows the importance of developing and establishing partnerships with internal and external entities (e.g., academic teachers, other career and technology educators, business and industry, postsecondary institutions, military).											
B. Applies skills and strategies for working and communicating effectively with educational partners (e.g., other professionals, parents and guardians, school boards, community organizations and agencies, business and industry, organized labor, proprietary and postsecondary institutions).											
C. Knows how to interact appropriately with families and other educational partners with diverse characteristics and backgrounds.											
D. Conducts effective meetings with parents and guardians, teachers and industrial advisory committees.											
E. Applies skills and procedures for organizing and working with advisory committees.											

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F. Knows how to maintain supportive and cooperative relationships with internal and external educational partners, identify and seek the support of resource persons, and engage in collaborative decision making and problem solving to support students' learning and well-being (e.g., providing services to special populations in trade and industrial programs).											
G. Knows the process for developing articulation agreements with education and training partners.											
H. Understands the impact of relationships between trade and industrial programs and advisory committees (e.g., curriculum, instruction, youth organizations, professional organizations).											
I. Knows how to work effectively with local civic and service organizations to promote trade and industrial education (e.g., marketing, recruiting, providing resources).											
J. Analyzes ways in which external factors influence the educational environment and the trade and industrial curriculum.											

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Competency 012: <i>The trade and industrial education teacher understands and fosters the development of leadership skills through delivery of the trade and industrial curriculum (TEKS) and implementation of the trade and industrial education state-approved student organizations.</i>											
A. Knows the cocurricular aspects of the trade and industrial student organizations within the curriculum, the benefits of a student organization and the dual role of an educator and student organization advisor.											
B. Establishes and maintains an active trade and industrial student organization chapter.											
C. Knows characteristics of effective leadership, models leadership skills and incorporates opportunities for students to develop leadership skills.											
D. Knows how to teach and apply conflict-resolution skills and problem-solving techniques.											
E. Recognizes the benefits and importance of community service and provides students with community service opportunities.											
F. Knows how to market trade and industrial programs and involve students in public relations efforts.											

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Competency 013: <i>The trade and industrial education teacher understands professional roles and responsibilities and adheres to legal and ethical requirements of the profession.</i>											
A. Understands the value of participating in program, school and community activities and performs professional responsibilities and duties outside the classroom, laboratory and work-based learning settings (e.g., serves on committees, volunteers to participate in events and project work with technical advisory committees).											
B. Knows characteristics, goals and procedures associated with teacher appraisal systems.											
C. Uses self-assessment to identify strengths, challenges and potential problems and applies strategies for improving teaching performance and achieving professional development goals.											
D. Participates in professional development activities for enhancing technical knowledge and pedagogical skills related to trade and industrial education (e.g., conferences, workshops, work with mentors, and other support systems).											
E. Recognizes the importance of lifelong learning (e.g., updating occupational specialization and pedagogical knowledge and skills) and knows how to use these experiences to enhance instruction in the trade and industrial program.											
F. Knows the benefits of maintaining membership in professional associations.											

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G. Knows legal requirements for educators (e.g., related to special education, child labor laws, students' and families' rights, student discipline, equity, child abuse, patent and copyright laws, OSHA, Office for Civil Rights, Section 504 of the Rehabilitation Act).											
H. Applies knowledge of ethical guidelines, policies and procedures for educators in Texas (e.g., related to confidentiality, interactions with students and others in the school and workplace, code of ethics).											
I. Uses knowledge of legal, ethical and workplace guidelines to identify appropriate behaviors in education and work-based situations.											
J. Knows procedures and requirements for administering state- and district-mandated assessments and for maintaining student records.											
K. Uses knowledge of the structure of the education system in Texas, including relationships among campus, local, state and federal entities, to seek information and assistance.											
L. Knows how to relate effectively and professionally to administrators, teachers, parents and guardians, and industrial partners.											
M. Knows how to serve as an advocate for students and for the teaching profession.											