

DRAFT Proposed Revisions  
Texas Essential Knowledge and Skills  
Career and Technical Education (CTE)—Career Development

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Prepared by the State Board of Education TEKS Review Committees

First Draft, August 2014

These draft proposed revisions reflect the changes to the career and technical education (CTE) Texas Essential Knowledge and Skills (TEKS) that have been recommended by State Board of Education-appointed TEKS review committees for courses in **Career Development**. Proposed additions are shown in green font with underlines (additions) and proposed deletions are shown in red font with strikethroughs (~~deletions~~).

Comments in the right-hand column provide explanations for the proposed changes. The following notations were used as part of the explanations:

**CRS**—information added or changed to align with the Texas College and Career Readiness Standards (CCRS)

**MV**—multiple viewpoints from within the committee

**VA**—information added, changed, or deleted to increase vertical alignment

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**§127.3. Exploring Careers. College and Career Readiness**

TEKS with edits		Committee Comments
(a)	<b>General requirements.</b> This course is recommended for students in Grades 7-8.	
(b)	<b>Introduction.</b>	CRS VA Repetition of information
(1)	<u>CTE instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</u>	
(2)	<u>Career development is a lifelong pursuit of answers to the questions: Who am I? Why am I here? and What am I meant to do with my life? It is a vital that students have a clear sense of the direction they would like to head with their career. Career planning is a critical step and is essential to a students' success.</u>	
(3)	<u>The career development process is unique to every person and evolves throughout one's life. Students will use decision-making and problem solving skills for college and career planning. Students will explore valid, reliable educational and career information to learn more about themselves and their interests and abilities. Students integrate skills from academic subjects, information technology, and interpersonal communication to make informed decisions. This course is designed to guide students through the process of investigation and in the development of a college and career readiness achievement plan. Students will use interest inventory software or other tools available resources to explore college and career areas of personal interests. Students will use this information to explore educational requirements for various college and a variety of chosen career paths. Districts have the flexibility of offering college and career readiness career exploration knowledge and skills in a variety of instructional arrangements.</u>	
(4)	<u>Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</u>	
(5)	<u>Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</u>	
(c)	<b>Knowledge and skills.</b>	
(1)	The student explores <del>personal interests and aptitudes</del> career assessment as they relate to <del>education</del> college and career planning. The student is expected to:	Career assessment is more comprehensive
(A)	<del>Complete, discuss, and</del> analyze <u>and discuss</u> the <u>initial</u> results of <u>career assessments</u> <del>personality, career interest, and aptitude assessments;</del>	Complete is not necessary, order of wording, VA
(B)	explore the <u>16</u> career clusters as defined by the U.S. Department of Education;	VA

(C)	<del>summarize the career opportunities in a cluster of personal interest;</del>	Redundant
(C)	research <u>trending</u> <del>current and emerging</del> fields related to <u>personal career</u> interest areas;	Less restrictive, VA
(D)	determine academic requirements in <u>related</u> career fields <del>related to personal interest areas;</del>	Less wording, VA
(F)	<del>explore how career choices impact the balance between personal and professional responsibilities; and</del>	Repetition of information
(G) (E)	research educational options and requirements <u>using available resources</u> <del>using appropriate technology.</del>	
(2)	The student analyzes personal interests and aptitudes regarding education and career planning. The student is expected to:	Redundant, VA
(A)	<del>create a personal career portfolio;</del>	Move to (4)
(B)	<del>make oral presentations that fulfill specific purposes using appropriate technology;</del>	Move to (4)
(C)	<del>develop and analyze tables, charts, and graphs related to career interests;</del>	VA
(D)	<del>determine the impact of technology on careers of personal interest; and</del>	Not relevant
(E)	<del>identify entrepreneurial opportunities within a field of personal interest.</del>	Move to (4)
(2)	The student analyzes college and career opportunities. The student is expected to:	
(A)	determine academic requirements for <u>transitioning to High School</u> <del>transition from one learning level to the next;</del>	More specific, VA
(B)	explore opportunities for earning college credit in high school such as advanced placement courses, International Baccalaureate courses, dual credit, and local and statewide articulated credit;	
(C)	develop an awareness of financial aid, scholarships, and other sources of income to support <u>college and career advancement</u> <del>postsecondary education;</del>	VA
(D)	discuss the impact of effective college and career planning;	
(E)	demonstrate decision-making skills related to school and community issues, programs of study, and <u>college and</u> career planning; and	VA
(F)	identify how performance on assessments such as the SAT®, ACT®, ASVAB®, and ACCUPLACER® impact personal academic and career goals.	
(3)	The student evaluates skills for personal success. The student is expected to:	
(A)	<del>implement effective study skills for academic success;</del>	Redundant
(A)	use interpersonal skills to facilitate effective teamwork;	

(B)	use <del>a</del> problem-solving models and critical-thinking skills to make informed decisions;	Plural models
(C)	use effective time-management and goal-setting strategies;	
(E)	<del>effectively use information and communication technology tools; and</del>	Redundant
(D)	identify skills that can be transferable among a variety of careers;	
(E)	<u>create a personal career portfolio;</u>	Moved from (2), VA
(F)	<u>make oral presentations that fulfill specific purposes using appropriate technology;</u>	Moved from (2), VA
(G)	<u>identify entrepreneurial opportunities within a field of personal interest.</u>	Moved from (2), VA
(4)	The student recognizes the impact of college and career choices on personal lifestyle. The student is expected to:	VA
(A)	prepare a personal budget reflecting the student's desired lifestyle;	
(B)	use <del>appropriate</del> resources to compare and contrast salaries and <del>educational requirements</del> of at least three careers in the student's interest area; and	Stated under another tek
(C)	<del>evaluate at least three career interests based on budget and salary expectations.</del>	Redundant
(5)	The student demonstrates an understanding of <del>personal</del> financial management. The student is expected to:	Broader
(A)	compare the advantages and disadvantages of different types of <del>money management banking</del> services;	Broader, VA
(B)	simulate opening and maintaining different types of <del>financial bank</del> accounts;	Broader, VA
(C)	simulate different methods of withdrawals and deposits; and	
(D)	reconcile <del>financial bank</del> statements, including fees and services.	Broader, VA
(E)	<u>compare and contrast forms of credit, including credit cards and debit cards;</u>	VA
(F)	<u>list the qualifications and procedures to obtain and improve credit scores;</u>	VA
(G)	<u>discuss the impact of identity theft on credit; and</u>	VA
(H)	<u>examine the effects of poor credit scores as they relate to personal finance and career opportunities.</u>	VA
(6)	The student <del>develops</del> skills for professional success. The student is expected to:	
(A)	demonstrate effective verbal, nonverbal, written, and electronic communication skills;	
(B)	evaluate the impact of positive and negative personal choices, including use of electronic communications such as social networking sites;	

(C)	model characteristics of effective leadership, teamwork, and conflict management;	
(D)	recognize the importance of a healthy lifestyle, including the ability to manage stress;	
(E)	explore <del>and model</del> characteristics necessary for professional success such as work ethics, integrity, dedication, perseverance, and <u>interactions</u> <del>the ability to interact</del> with a diverse population; <del>and</del> .	Wordy,
(F)	<del>complete activities using project and time management techniques.</del>	
(8)	The student identifies and explores technical skills essential to careers in multiple occupations, including those that are high skill, high wage, or high demand. The student is expected to:	Teks are in Career Portals, VA
(A)	<del>complete actual or virtual labs to simulate the technical skills required in various occupations; and</del>	Teks are in Career Portals, VA
(B)	<del>analyze the relationship between various occupations such as the relationship between interior design, architectural design, manufacturing, and construction on the industry of home building or the multiple occupations required for hospital administration.</del>	Teks are in Career Portals, VA

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**§127.4. Career Portals. Investigating Careers**

TEKS with edits		Committee Comments
(a)	<b>General requirements.</b> This course is recommended for students in Grades 7-8.	
(b)	<b>Introduction.</b>	VA, CRS
(1)	<u>CTE instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</u>	
(2)	<u>Career development is a lifelong pursuit of answers to the questions: Who am I? Why am I here; and What am I meant to do with my life? It is a vital that students have a clear sense of the direction they would like to head with their career. Career planning is a critical step and is essential to a students' success.</u>	
(3)	The goal of this course is to create <del>a culture of high expectation and continuous improvement that provides middle school students with</del> a foundation for success in high school, future studies, and careers <u>such as; STEM, Business and Industry, Public Service, Arts and Humanities, and Multidisciplinary Studies.</u> <del>Students explore college and career planning within specific career cluster(s).</del> The students research labor market information, learn job-seeking skills, and create documents required for employment. <del>Students use self knowledge to explore and set realistic goals.</del> Districts have the flexibility of offering career exploration knowledge and skills in a variety of instructional arrangements.	
(4)	<u>Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations</u>	
(5)	<u>Statements that contain the word “including” reference content that must be mastered, while those containing the phrase “such as” are intended as possible illustrative examples</u>	
(c)	<b>Knowledge and skills.</b>	
(1)	The student <del>explores</del> <u>investigates</u> one or more careers <u>within the 16 career</u> clusters of interest. The student is expected to:	Wording, VA
(A)	identify the various career opportunities within one or more career clusters; and	
(B)	identify the pathways within one or more career clusters.	
(2)	The student <del>explores</del> <u>investigates</u> pathways of interest <del>in within</del> one or more careers <u>of the 16 career</u> clusters. The student is expected to:	Wording, VA
(A)	<del>investigate career opportunities within the pathways;</del>	Same as (1)(A and B)
(B)	<del>explore careers of personal interest;</del>	Same as (1)(A and B)
<del>(C)</del> (A)	research the academic requirements for <u>one or more of the careers in an identified cluster;</u>	

	<del>careers of personal interest;</del>	
<del>(D)</del> (B)	research the certification or educational requirements for careers; <del>of personal interest; and</del>	
<del>(E)</del> (C)	describe the technical-skill requirements for careers <del>of personal interest.</del>	
(3)	<del>The student explores investigates programs of study. The student is expected to:</del>	Redundant: Stated in previous teks
(A)	<del>compare levels of education for careers of personal interest;</del>	
(B)	<del>identify the academic and technical skills needed; and</del>	
(C)	<del>develop a personal program of study for at least one career.</del>	
<del>(4)</del> (3)	The student <del>explores</del> <u>investigates</u> the professional skills needed for college and career success. The student is expected to:	
(A)	<del>articulate the importance of</del> <u>apply core</u> <del>strong</del> academic skills to meet personal, academic and career goals;	VA
(B)	<del>explore</del> <u>investigate</u> the importance of <u>co</u> -curricular, extracurricular, career preparation, and extended learning experiences;	VA
(C)	<del>develop a personal six or eight year achievement plan that incorporates rigorous academic and relevant enrichment courses;</del>	Redundant
<del>(D)</del> (C)	<del>explore</del> <u>investigate</u> the steps required to participate in a variety of career and educational opportunities, including, but not limited to, entry-level employment, military service, apprenticeships, community and technical colleges, and universities;	
<del>(E)</del> (D)	identify professional associations affiliated with a <u>career pathway</u> <del>specified program of study;</del>	
(F)	<del>employ effective leadership, teamwork, and conflict management;</del>	Does not go with others, already covered in other teks
<del>(G)</del> (E)	recognize the value of community service and volunteerism; and	
<del>(H)</del> (F)	demonstrate characteristics required for personal and professional success, <u>such as:</u> <del>including</del> work ethics, integrity, dedication, perseverance, and <del>the ability to</del> <u>interacting</u> with a diverse populations.	Wording
(5)	<del>The student understands personal financial management and recognizes the value of personal fiscal responsibility. The student is expected to:</del>	
(A)	<del>compare and contrast different types of banking services;</del>	Teks covered in previous course, VA
(B)	<del>open and maintain different types of simulated bank accounts;</del>	Teks covered in previous course, VA
(C)	<del>practice different methods of withdrawing and depositing funds;</del>	Teks covered in previous course, VA
(D)	<del>reconcile bank statements, including fees and services;</del>	Teks covered in previous course, VA

(E)	<del>compare and contrast forms of credit, including credit cards and debit cards;</del>	Teks covered in previous course, VA
(F)	<del>list the qualifications and procedures to obtain and improve credit scores;</del>	Teks covered in previous course, VA
(G)	<del>discuss the impact of identity theft on credit; and</del>	Teks covered in previous course, VA
(H)	<del>examine the effects of poor credit scores as they relate to personal finance and career opportunities.</del>	Teks covered in previous course, VA
<del>(6)</del> (4)	The student <del>explores</del> <u>investigates</u> labor market information. The student is expected to:	wording
(A)	analyze national, state, regional, and local labor market information;	
(B)	<del>ite</del> <u>classify</u> evidence of high-skill, high-wage, or high-demand occupations based on analysis of labor market information; and	wording
(C)	analyze the effects of changing employment trends, societal needs, and economic conditions on career planning.	
<del>(7)</del> (5)	The student <del>explores</del> <u>investigates</u> job-seeking skills. The student is expected to:	Wording
(A)	identify the steps for an effective job search;	
(B)	describe appropriate appearance for an interview; and	
(C)	participate in a mock interview.	
<del>(8)</del> (6)	The student creates professional documents required for employment. The student is expected to:	
(A)	develop a resumé;	
(B)	write appropriate business correspondence such as a letter of intent and a thank you letter;	
(C)	complete sample job applications; and	
(D)	explain protocol for <u>selecting and using</u> <del>use of</del> references.	

§127.13. Career Preparation I (Two <del>to Three</del> Credits).		
	TEKS with Edits	Committee Comments
(a)	<b>General requirements.</b> This course is recommended for students in Grades 11-12. <u>Prerequisite for Career Preparation II.</u>	
(b)	<b>Introduction.</b>	
(1)	<u>CTE instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</u>	
(2)	Career Preparation I provides opportunities for students to participate in a <u>work-based</u> learning experience that combines classroom instruction with paid business and industry employment experiences. <del>and supports strong partnerships among school, business, and community stakeholders.</del> The goal is to prepare students with a variety of skills for a <del>fast</del> changing workplace. <del>This instructional arrangement should be an advanced component of a student's individual program of study. Students are taught employability skills, which include job-specific skills applicable to their training station, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development.</del> Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.	Too much wording and confusion in text
(3)	<u>Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</u>	
(4)	<u>Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</u>	
(c)	<b>Knowledge and skills.</b>	
(1)	The student uses employability skills to gain an entry-level job <del>in a high-skill, high-wage, or high-demand field.</del> The student is expected to:	Too wordy, va
(A)	identify employment opportunities;	
(B)	demonstrate the application of essential workplace skills <del>in the career acquisition process;</del>	confusion
(C)	develop a <del>personal</del> resumé;	
(D)	<del>complete job search documents, including job applications and I-9 and W-4 forms;</del>	redundant
(E)	demonstrate proper interview techniques in various situations; and	
(F)	create and complete appropriate documents such as electronic portfolio, employment application, letter of intent, <u>I-9 form, W-4 form,</u> and thank you letters.	Taken from (1)(D)
(2)	The student develops skills for success in the workplace. The student is expected to:	
(A)	identify and model appropriate grooming and appearance for the workplace;	

(B)	demonstrate dependability, punctuality, and initiative;	
(C)	research positive interpersonal skills, including respect for diversity;	
(D)	model appropriate business and personal etiquette in the workplace;	
(E)	exhibit productive work habits, ethical practices, and a positive attitude;	
(F)	demonstrate the ability to work with the other employees to support the organization and complete assigned tasks;	
(G)	identify how to prioritize work to fulfill responsibilities and meet deadlines;	
(H)	evaluate the relationship of good physical and mental health to job success and personal achievement; <del>and</del>	
(I)	demonstrate effective methods to secure, maintain, and terminate employment; <del>and-</del>	
<u>(J)</u>	<u>develops soft skills in a working environment.</u>	New tek added to course
(3)	The student <u>discuss</u> <del>applies</del> work ethics, employer expectations and interactions with diverse populations, and communication skills in the workplace. The student is expected to:	Wording
(A)	illustrate how personal integrity affects human relations on the job;	
(B)	research characteristics of successful working relationships such as teamwork, conflict resolution, self-control, and ability to accept criticism;	
(C)	<u>discuss and</u> analyze employer expectations;	Wording
(D)	demonstrate respect for the rights of others;	
(E)	develop listening skills;	
(F)	apply effective listening skills used in the workplace;	
(G)	identify ethical standards; and	
(H)	comply with organizational policies and procedures.	
(4)	The student applies academic skills to <u>the workplace</u> <del>job skills</del> . The student is expected to:	Wording
(A)	apply mathematical skills to business transactions;	
(B)	develop a personal budget based on a career choice;	
(C)	interpret data from tables, charts, and graphs to estimate and find solutions to problems; and	
(D)	organize, write, and compile workplace business documents.	
(5)	The student applies <u>the</u> ethical <u>code of conduct</u> <del>behavior standards</del> and legal responsibilities within the workplace. The student is expected to:	Wording

(A)	research and compare published workplace policies and procedures;	
(B)	demonstrate responsible and ethical behavior;	
(C)	summarize provisions of the Fair Labor Standards Act;	
(D)	describe the consequences of breach of confidentiality; and	
(E)	research and describe laws related to different careers.	
(6)	The student applies the use of self-development techniques and interpersonal skills <del>to accomplish objectives</del> . The student is expected to:	Wording
(A)	identify and practice effective interpersonal and team-building skills with coworkers, managers, and customers; and	
(B)	develop effective leadership skills through participation in activities such as career and technical student organizations.	
(7)	The student applies concepts and skills related to safety <del>in at</del> the workplace. The student is expected to:	
(A)	identify and apply safe working practices related to <del>the workplace training station</del> ;	Wording
(B)	demonstrate knowledge of personal and occupational safety practices in the workplace;	
(C)	offer solutions related to unsafe work practices and attitudes;	
(D)	explain Occupational Safety and Health Administration regulations in the workplace; and	
(E)	determine health and wellness practices that influence job performance.	
(8)	The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	
(A)	analyze the future employment outlook in the occupational area;	
(B)	describe entrepreneurial opportunities in the occupational area;	
(C)	compare rewards and demands for various levels of employment in a variety of careers;	
(D)	evaluate strategies for career retention and advancement in response to the changing global workplace;	
(E)	summarize the rights and responsibilities of employers and employees; and	
(F)	determine effective money-management and financial-planning techniques.	
(9)	The student identifies skills and attributes necessary for professional advancement. The student is expected to:	
(A)	evaluate and compare employment options, including salaries and benefits;	

(B)	compare rewards and demands for various levels of employment in a variety of careers;	
(C)	determine how interests, abilities, personal priorities, and family responsibilities affect career choices; and	
(D)	determine continuing education opportunities that enhance career advancement and promote lifelong learning.	

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**§127.14. Career Preparation II (Two ~~to Three~~ Credits).**

TEKS with edits		Committee Comments
(a)	<b>General requirements.</b> This course is recommended for students in Grade 12. <del>Recommended</del> <del>P</del> Prerequisite: Career Preparation I.	
(b)	<b>Introduction.</b>	
(1)	<u>CTE instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions</u>	
(2)	Career Preparation II develops essential knowledge and skills through <u>advanced</u> classroom <del>technical</del> instruction <u>with paid business and industry employment experiences, and on-the-job training in an approved business and industry training area.</u> <del>Students will develop skills for lifelong learning, employability, leadership, management, work ethics, safety, and communication as a group; however, each student will have an individual training plan that will address job-specific knowledge and skills. Approved training sponsors will provide paid occupational training for a student. The training sponsor will assist the teacher in providing the necessary knowledge and skills for the student's specific career preparation.</del> <u>Career Preparation II maintains relevance and rigor, supports student attainment of academic standards, and effectively prepares students for college and career success.</u>	Too wordy for introduction, Va
(3)	<u>Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</u>	
(4)	<u>Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</u>	
(c)	<b>Knowledge and skills.</b>	
(1)	The student uses and evaluates employability skills to <u>improve marketability within the workplace.</u> <del>maintain a position in a company.</del> The student is expected to:	Wording
(A)	<del>create</del> <u>refine</u> a professional electronic portfolio, including a two- to four-year individual career plan of study, resumé, cover letter, awards, commendations, and thank you letters;	Wording
(B)	obtain letters of recommendation;	
(C)	expand personal communication skills; and	
(D)	refine interview skills.	
(2)	The student develops advanced knowledge and skills associated with success in the workplace. The student is expected to:	
(A)	maintain appropriate grooming and appearance for the workplace;	

(B)	demonstrate positive interpersonal skills, including respect for diversity;	
(C)	demonstrate appropriate business and personal etiquette in the workplace;	
(D)	exhibit productive work habits, attitudes, and ethical practices;	
(E)	evaluate consequences for breach of personal and occupational safety practices in the workplace; and	
(F)	prioritize work to fulfill responsibilities and meet deadlines.	
(3)	The student applies work ethics, job expectations, multicultural considerations, and communication skills in the workplace. The student is expected to:	
(A)	evaluate personal integrity and its effects on human relations in the workplace;	
(B)	evaluate characteristics of successful working relationships such as teamwork, conflict resolution, self-control, and the ability to accept criticism;	
(C)	recognize and appreciate diversity in the workplace;	
(D)	analyze employer expectations;	
(E)	exhibit productive work habits and attitudes;	
(F)	communicate effectively to a variety of audiences;	
(G)	analyze ethical standards; and	
(H)	comply with organizational policies and procedures.	
(4)	The student applies <b>and enhances</b> academic knowledge and skills in the workplace. The student is expected to:	
(A)	apply critical- and creative-thinking skills to solve complex problems;	
(B)	integrate mathematical concepts into business transactions;	
(C)	analyze and apply data from tables, charts, and graphs to find solutions to problems;	
(D)	apply effective listening skills used in the workplace;	
(E)	read and write technical reports and summaries; and	
(F)	apply effective verbal, nonverbal, written, and electronic communication skills.	
(5)	The student recognizes legal responsibilities of the workplace. The student is expected to:	
(A)	evaluate provisions of the Fair Labor Standards Act;	
(B)	analyze the legal consequences of breach of confidentiality; and	
(C)	research and describe laws governing the different professions.	

(6)	The student recognizes the dangers of identity theft. The student is expected to:	
(A)	identify various methods criminals use to obtain information; and	
(B)	research how to avoid becoming a victim.	
(7)	The student applies the use of <del>self-development techniques and</del> interpersonal skills to improve personal development. The student is expected to:	VA
(A)	evaluate effective interpersonal and team-building skills involving situations with coworkers, managers, and customers; and	
(B)	participate in leadership and career-development activities.	
(8)	The student recognizes knowledge and skills related to safety in the workplace. The student is expected to:	
(A)	apply safe working practices to training station;	
(B)	evaluate unsafe work practices and attitudes;	
(C)	evaluate the impact of Occupational Safety and Health Administration regulations in the workplace;	
(D)	recognize the importance of applying safety rules in all situations; and	
(E)	analyze health and wellness practices that influence job performance.	
(9)	The student acquires the academic and technical skills for future education and employment in high-skill, high-wage, or high-demand occupations. The student is expected to:	
(A)	research and identify current or emerging occupations;	
(B)	analyze future employment outlook;	
(C)	research entrepreneurial opportunities;	
(D)	analyze rewards and demands for various levels of employment;	
(E)	identify the academic and technical entry requirements for employment in various high-skill, high-wage, or high-demand occupations;	
(F)	identify and pursue opportunities; available in high school and <del>postsecondary</del> <del>post secondary</del> , to acquire the necessary academic and technical skills for employment in high-skill, high-wage, or high-demand occupations;	Spelling
(G)	evaluate the rights and responsibilities of employers and employees; and	
(H)	apply money-management and financial-planning techniques.	

(10)	The student identifies skills and <u>characteristics</u> <del>attributes</del> necessary for professional advancement. The student is expected to:	Wording
(A)	evaluate and compare employment <u>advancement</u> options, such as, salaries, benefits, and prerequisites;	
(B)	compare rewards and demands for various levels of employment in a variety of careers;	
(C)	determine continuing education opportunities that enhance career advancement and promote lifelong learning;	
(D)	determine preparation requirements for levels of employment in a variety of careers;	
(E)	determine <u>personal priorities, such as,</u> interests, abilities, <del>personal priorities,</del> and family responsibilities affecting career choice; and	Grammar
(F)	demonstrate effective methods to secure, maintain, and terminate employment.	

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**§127.15. Problems and Solutions Project-Based Research (One-Half to One Credit).**

TEKS with edits		Committee Comments
(a)	<b>General requirements.</b> This course is recommended for students in Grades 11-12.	
(b)	<b>Introduction</b>	Not relevant, VA
(1)	<u>CTE instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</u>	
(2)	<u>Career development is a lifelong pursuit of answers to the questions: Who am I? Why am I here; and What am I meant to do with my life? It is a vital that students have a clear sense of the direction they would like to head with their career. Career planning is a critical step and is essential to a students' success.</u>	
(3)	<del>Problems and Solutions is a p</del> Project-based research is a course for students <del>who have the ability</del> to research a real-world problem. Students <del>are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests.</del> Students use scientific methods of investigation to conduct in-depth research, <del>are matched with a mentor from the business or professional community,</del> compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge, <del>and skills, and technologies</del> in a variety of settings. <del>This course is designed to provide students an opportunity to earn one advanced measure for the Distinguished Achievement Program.</del>	
(4)	<u>Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations</u>	
(5)	<u>Statements that contain the word “including” reference content that must be mastered, while those containing the phrase “such as” are intended as possible illustrative examples</u>	
(c)	<b>Knowledge and skills.</b>	
(1)	The student applies mathematics, science, English language arts, and social studies in <u>an</u> independent study. The student is expected to:	
(A)	select an original independent study project for personal enrichment and <u>career</u> <del>professional</del> development;	Wording
(B)	use reading and research skills to investigate self-selected topics and compile a research portfolio;	
(C)	collaborate with an interdisciplinary team to develop a project;	
(D)	identify community, state, national, or international issues to select a project;	

(E)	conduct a project under the supervision of a mentor;	
(F)	use scientific methods of investigation;	
(G)	apply statistical concepts to analyze data, evaluate results, and draw conclusions;	
(H)	compare and contrast findings in a coherent and organized manner; and	
(I)	present the independent research project to an appropriate audience of experts in the field using a variety of technologies.	
(2)	The student uses verbal and nonverbal communication skills. The student is expected to:	
(A)	listen actively and effectively in group discussions;	
(B)	use a variety of resources to access, process, and collect data relevant to the project; and	
(C)	document the time and cost to accomplish the project goal.	
(3)	The student demonstrates professional ethical behavior standards and legal responsibilities. The student is expected to:	
(A)	analyze ethical challenges <del>posed</del> <u>determined</u> by factors such as cost <del>containment</del> , new and emerging technologies, and allocation of limited resources; and	Wording
(B)	review legal issues related to the research project.	
(4)	The student designs and develops a research project related to their career interests. The student is expected to:	
(A)	identify processes to be used in the independent research project; and	
(B)	use resources to complete a project.	
(5)	The student uses technology needed to complete a research project. The student is expected to:	
(A)	use search engines, databases, and other digital electronic tools effectively to locate information;	
(B)	evaluate quality, accuracy, completeness, reliability, and currency of information from any source;	
(C)	prepare, organize, and present independent research, <u>and</u> mentor experiences, <del>and processes</del> ;	Wording
(D)	accept constructive criticism and revise personal views when valid evidence warrants; and	
(E)	prepare and present <del>scientific/technical</del> <u>research</u> information in appropriate formats to a panel of experts in the field <del>of the research project</del> .	Wording
(6)	The student evaluates the <del>original</del> research project. The student is expected to:	
(A)	create weekly progress reports that address time management and goal setting;	

(B)	meet periodically with the teacher for conferences about progress, concerns, successes, and needs;	
(C)	conduct self-evaluations of <b>speech</b> presentations;	
(D)	compose written reflections regarding strengths and weaknesses as well as areas of growth;	
(E)	analyze the feedback from the panel of experts; and	
(F)	submit project results and analysis to mentors and experts.	

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**Career Preparation I Application (One Credit).**

TEKS with Edits		Committee Comments
(a)	<b>General requirements.</b> This course is recommended for students in Grades 11-12. Prerequisite for Career Preparation II. Co-Requisite: Career Preparation II Foundation	
(b)	<b>Introduction.</b>	
(1)	CTE instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.	
(2)	Career development is a lifelong pursuit of answers to the questions: Who am I? Why am I here; and What am I meant to do with my life? It is a vital that students have a clear sense of the direction they would like to head with their career. Career planning is a critical step and is essential to a students’ success.	
(3)	Career Preparation I provides opportunities for students to participate in a work- based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.	
(4)	Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.	
(5)	Statements that contain the word “including” reference content that must be mastered, while those containing the phrase “such as” are intended as possible illustrative examples	
(c)	<b>Knowledge and skills.</b>	
(1)	The student applies the ethical code of conduct and legal responsibilities within the workplace. The student is expected to:	
(A)	research and compare published workplace policies and procedures;	
(B)	demonstrate responsible and ethical behavior;	
(C)	summarize provisions of the Fair Labor Standards Act;	
(D)	describe the consequences of “breach of confidentiality”; and	
(E)	research and describe laws related to different careers.	
(2)	The student applies the use of self-development techniques and interpersonal skills. The student is expected to:	

(A)	<u>identify and practice effective interpersonal and team-building skills with coworkers, managers, and customers; and</u>	
(B)	<u>develop effective leadership skills through participation in activities such as career and technical student organizations.</u>	
(3)	<u>The student applies concepts and skills related to safety in the workplace. The student is expected to:</u>	
(A)	<u>identify and apply safe working practices related to the workplace;</u>	
(B)	<u>demonstrate knowledge of personal and occupational safety practices in the workplace;</u>	
(C)	<u>offer solutions related to unsafe work practices and attitudes;</u>	
(D)	<u>explain Occupational Safety and Health Administration regulations in the workplace; and</u>	
(E)	<u>determine health and wellness practices that influence job performance.</u>	
(4)	<u>The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:</u>	
(A)	<u>analyze the future employment outlook in the occupational area;</u>	
(B)	<u>describe entrepreneurial opportunities in the occupational area;</u>	
(C)	<u>compare rewards and demands for various levels of employment in a variety of careers;</u>	
(D)	<u>evaluate strategies for career retention and advancement in response to the changing global workplace;</u>	
(E)	<u>summarize the rights and responsibilities of employers and employees; and</u>	
(F)	<u>determine effective money-management and financial-planning techniques.</u>	
(5)	<u>The student identifies skills and attributes necessary for professional advancement. The student is expected to:</u>	
(A)	<u>evaluate and compare employment options, including salaries and benefits;</u>	
(B)	<u>compare rewards and demands for various levels of employment in a variety of careers;</u>	
(C)	<u>determine how interests, abilities, personal priorities, and family responsibilities affect career choices; and</u>	
(D)	<u>determine continuing education opportunities that enhance career advancement and promote lifelong learning.</u>	

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## Career Preparation I Foundation (One Credit).

TEKS with Edits		Committee Comments
(a)	<b>General requirements.</b> This course is recommended for students in Grades 11-12. Prerequisite for Career Preparation II. Co-Requisite: Career Preparation II Application	
(b)	<b>Introduction.</b>	
(1)	CTE instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.	
(1)	Career development is a lifelong pursuit of answers to the questions: Who am I? Why am I here; and What am I meant to do with my life? It is a vital that students have a clear sense of the direction they would like to head with their career. Career planning is a critical step and is essential to a students' success.	
(1)	Career Preparation I provides opportunities for students to participate in a work- based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.	
(1)	Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations	
(1)	Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples	
(c)	<b>Knowledge and skills.</b>	
(1)	The student uses employability skills to gain an entry-level position. The student is expected to:	
(A)	identify employment opportunities;	
(B)	demonstrate the application of essential workplace knowledge and skills;	
(C)	develop a resumé;	
(D)	demonstrate proper interview techniques in various situations; and	
(E)	create and complete appropriate documents such as electronic portfolio, employment application, letter of intent, I-9 form, W-4 form, and thank you letters.	
(2)	The student develops skills for success in the workplace. The student is expected to:	
(A)	identify and model appropriate grooming and appearance for the workplace;	
(B)	demonstrate dependability, punctuality, and initiative;	

(C)	<u>research positive interpersonal skills, including respect for diversity;</u>	
(D)	<u>model appropriate business and personal etiquette in the workplace;</u>	
(E)	<u>exhibit productive work habits, ethical practices, and a positive attitude;</u>	
(F)	<u>demonstrate the ability to work with other employees to support the organization and complete assigned tasks;</u>	
(G)	<u>identify how to prioritize work to fulfill responsibilities and meet deadlines;</u>	
(H)	<u>evaluate the relationship of good physical and mental health to job success and personal achievement;</u>	
(I)	<u>demonstrate effective methods to secure, maintain, and terminate employment; and-</u>	
(J)	<u>develop soft skills in a working environment.</u>	
(3)	<u>The student discusses work ethics, employer expectations and interactions with diverse populations, and communication skills in the workplace. The student is expected to:</u>	
(A)	<u>illustrate how personal integrity affects human relations on the job;</u>	
(B)	<u>research characteristics of successful working relationships such as teamwork, conflict resolution, self-control, and ability to accept criticism;</u>	
(C)	<u>discuss and analyze employer expectations;</u>	
(D)	<u>demonstrate respect for the rights of others;</u>	
(E)	<u>develop listening skills;</u>	
(F)	<u>apply effective listening skills used in the workplace;</u>	
(G)	<u>identify ethical standards; and</u>	
(H)	<u>comply with organizational policies and procedures.</u>	
(4)	<u>The student applies academic skills to the workplace. The student is expected to:</u>	
(A)	<u>apply mathematical skills to business transactions;</u>	
(B)	<u>develop a personal budget based on a career choice;</u>	
(C)	<u>interpret data from tables, charts, and graphs to estimate and find solutions to problems; and</u>	
(D)	<u>organize, write, and compile workplace business documents.</u>	

## Career Preparation II Application (One Credit)

TEKS with edits		Committee Comments
(a)	<b><u>General requirements.</u></b> This course is recommended for students in Grade 12. Prerequisite: Career Preparation I. Co-requisite: Career Preparation II Foundation	
(b)	<b><u>Introduction.</u></b>	
(1)	<u>CTE instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</u>	
(2)	<u>Career development is a lifelong pursuit of answers to the questions: Who am I? Why am I here: and What am I meant to do with my life? It is a vital that students have a clear sense of the direction they would like to head with their career. Career planning is a critical step and is essential to a students' success.</u>	
(3)	<u>Career Preparation II develops essential knowledge and skills through advanced classroom instruction with business and industry employment experiences. Career Preparation II maintains relevance and rigor, supports student attainment of academic standards, and effectively prepares students for college and career success.</u>	
(4)	<u>Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations</u>	
(5)	<u>Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples</u>	
(c)	<b><u>Knowledge and skills.</u></b>	
(1)	<u>The student develops advanced knowledge and skills associated with success in the workplace. The student is expected to:</u>	
(A)	<u>maintain appropriate grooming and appearance for the workplace;</u>	
(B)	<u>demonstrate positive interpersonal skills, including respect for diversity;</u>	
(C)	<u>demonstrate appropriate business and personal etiquette in the workplace;</u>	
(D)	<u>exhibit productive work habits, attitudes, and ethical practices;</u>	
(E)	<u>evaluate consequences for breach of personal and occupational safety practices in the workplace; and</u>	
(F)	<u>prioritize work to fulfill responsibilities and meet deadlines.</u>	
(2)	<u>The student applies work ethics, job expectations, multicultural considerations, and communication skills in the workplace. The student is expected to:</u>	

(A)	<u>evaluate personal integrity and its effects on human relations in the workplace;</u>	
(B)	<u>evaluate characteristics of successful working relationships such as teamwork, conflict resolution, self-control, and the ability to accept criticism;</u>	
(C)	<u>recognize and appreciate diversity in the workplace;</u>	
(D)	<u>analyze employer expectations;</u>	
(E)	<u>exhibit productive work habits and attitudes;</u>	
(F)	<u>communicate effectively to a variety of audiences;</u>	
(G)	<u>analyze ethical standards; and</u>	
(H)	<u>comply with organizational policies and procedures.</u>	
(3)	<u>The student applies and enhances academic knowledge and skills in the workplace. The student is expected to:</u>	
(A)	<u>apply critical- and creative-thinking skills to solve complex problems;</u>	
(B)	<u>integrate mathematical concepts into business transactions;</u>	
(C)	<u>analyze and apply data from tables, charts, and graphs to find solutions to problems;</u>	
(D)	<u>apply effective listening skills used in the workplace;</u>	
(E)	<u>read and write technical reports and summaries; and</u>	
(F)	<u>apply effective verbal, nonverbal, written, and electronic communication skills.</u>	
(4)	<u>The student applies the use of interpersonal skills to improve personal development. The student is expected to:</u>	
(A)	<u>evaluate effective interpersonal and team-building skills involving situations with coworkers, managers, and customers; and</u>	
(B)	<u>participate in leadership and career-development activities.</u>	

<b>Career Preparation II Foundation (One Credit).</b>		
	TEKS with edits	Committee Comments
(a)	<b>General requirements.</b> This course is recommended for students in Grade 12. Prerequisite: Career Preparation I. Co-Requisite: Career Preparation II Application	
(b)	<b>Introduction.</b>	
(1)	CTE instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.	
(2)	Career development is a lifelong pursuit of answers to the questions: Who am I? Why am I here; and What am I meant to do with my life? It is a vital that students have a clear sense of the direction they would like to head with their career. Career planning is a critical step and is essential to a students' success.	
(3)	Career Preparation II develops essential knowledge and skills through advanced classroom instruction with business and industry employment experiences. Career Preparation II maintains relevance and rigor, supports student attainment of academic standards, and effectively prepares students for college and career success.	
(4)	Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations	
(5)	Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples	
(c)	<b>Knowledge and skills.</b>	
(1)	The student uses and evaluates employability skills to improve marketability within the workplace. The student is expected to:	
(A)	refine a professional electronic portfolio, such as, a two- to four-year individual career plan of study, resumé, cover letter, awards, commendations, and thank you letters;	
(B)	obtain letters of recommendation;	
(C)	expand personal communication skills; and	
(D)	refine interview skills.	
(2)	The student recognizes legal responsibilities of the workplace. The student is expected to:	
(A)	evaluate provisions of the Fair Labor Standards Act;	
(B)	analyze the legal consequences of "breach of confidentiality"; and	
(C)	research and describe laws governing the different professions.	

(3)	<u>The student recognizes the dangers of identity theft. The student is expected to:</u>	
(A)	<u>identify various methods criminals use to obtain information; and</u>	
(B)	<u>research how to avoid becoming a victim.</u>	
(4)	<u>The student recognizes knowledge and skills related to safety in the workplace. The student is expected to:</u>	
(A)	<u>apply safe working practices to training station;</u>	
(B)	<u>evaluate unsafe work practices and attitudes;</u>	
(C)	<u>evaluate the impact of Occupational Safety and Health Administration regulations in the workplace;</u>	
(D)	<u>recognize the importance of applying safety rules in all situations; and</u>	
(E)	<u>analyze health and wellness practices that influence job performance.</u>	
(5)	<u>The student acquires the academic and technical skills for future education and employment in high-skill, high-wage, or high-demand occupations. The student is expected to:</u>	
(A)	<u>research and identify current or emerging occupations;</u>	
(B)	<u>analyze future employment outlook;</u>	
(C)	<u>research entrepreneurial opportunities;</u>	
(D)	<u>analyze rewards and demands for various levels of employment;</u>	
(E)	<u>identify the academic and technical entry requirements for employment in various high-skill, high-wage, or high-demand occupations;</u>	
(F)	<u>identify and pursue opportunities, available in high school and postsecondary to acquire the necessary academic and technical skills for employment in high-skill, high-wage, or high-demand occupations;</u>	
(G)	<u>evaluate the rights and responsibilities of employers and employees; and</u>	
(H)	<u>apply money-management and financial-planning techniques.</u>	
(6)	<u>The student identifies skills and characteristics necessary for professional advancement. The student is expected to:</u>	
(A)	<u>evaluate and compare employment advancement options, such as, salaries, benefits, and prerequisites;</u>	
(B)	<u>compare rewards and demands for various levels of employment in a variety of careers;</u>	
(C)	<u>determine continuing education opportunities that enhance career advancement and promote</u>	

	<u>lifelong learning;</u>	
<u>(D)</u>	<u>determine preparation requirements for levels of employment in a variety of careers;</u>	
<u>(E)</u>	<u>determine personal priorities, such as, interests, abilities, and family responsibilities affecting career choice; and</u>	
<u>(F)</u>	<u>demonstrate effective methods to secure, maintain, and terminate employment.</u>	

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## Applied Mathematics for Technical Professionals (One Credit)

<u>TEKS with edits</u>		<u>Committee Comments</u>
<u>(a)</u>	<b>General requirements.</b> This course is recommended for students in Grades 11-12.	
<u>(b)</u>	<p><b><u>Introduction:</u></b></p> <ol style="list-style-type: none"> <li>1. <u>CTE instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</u></li> <li>2. <u>Career development is a lifelong pursuit of answers to the questions: Who am I? Why am I here: and What am I meant to do with my life? It is a vital that students have a clear sense of the direction they would like to head with their career. Career planning is a critical step and is essential to a students’ success.</u></li> <li>3. <u>Problem solving situations, hands-on activities and technology are used in this course to extend mathematical thinking and engage student reasoning. Situations relating to technical applications provide students opportunities to make connections with mathematics and the workplace. In addition, students will learn the skills necessary to communicate using mathematics. Hands-on activities will allow students to model, explore and develop abstract concepts applicable to technical careers. (Essential to this course is the partnership between math and technical teachers.)</u></li> <li>4. <u>Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations</u></li> <li>5. <u>Statements that contain the word “including” reference content that must be mastered, while those containing the phrase “such as” are intended as possible illustrative examples</u></li> </ol>	
<u>(c)</u>	<b><u>Knowledge and skills.</u></b>	
<u>(1)</u>	<u>The student uses mathematical concepts of algebra to explain linear and non-linear applications in business and industrial situations. The student is expected to:</u>	
<u>(A)</u>	<u>calculate the rise and run; such as stair stringers and roof pitch;</u>	
<u>(B)</u>	<u>distinguish the purpose and difference of a linear and non-linear increase and decrease of a variable with time; such as cost or profit;</u>	
<u>(C)</u>	<u>write systems of equations and inequalities from real life situations that compare “best deal opportunities” with profit and expenses in businesses;</u>	

(D)	<u>use linear programming to maximize or minimize linear objective function in real life situations and determine the reasonableness of solutions;</u>	
(E)	<u>express numbers as powers of 10 as it applies to business and industry settings;</u>	
(F)	<u>determine the powers and roots of numbers;</u>	
(G)	<u>apply compound interest formulas related to operating a business; and</u>	
(H)	<u>use exponential decay models to determine the depreciation on equipment used in business and industry, and explain the meaning of models.</u>	
(2)	<u>The student applies geometric concepts to real world problems in technical situations. The student is expected to:</u>	
(A)	<u>identify various geometric figures in order to identify what formulas are needed to solve situational problems;</u>	
(B)	<u>compute measurements such as area, surface area, volume, perimeter and circumference in order to prepare engineering drawings for projects;</u>	
(C)	<u>use all trigonometric functions such as sine, cosine, tangent, cosecant, secant, and cotangent to calculate angles and length of sides;</u>	
(D)	<u>apply Heron's formula for finding areas of triangles when the height is not known;</u>	
(E)	<u>determine how changing dimensions will affect the perimeter, area, surface area, or volume in a project;</u>	
(F)	<u>understand the functions of angles to determine how they will affect the structural strength and stability;</u>	
(G)	<u>apply right triangle relationships using the Pythagorean Theorem, special right triangles, and trigonometry for roof construction, building the frame of a car, or calculating a machined parts;</u>	
(H)	<u>find missing parts of a circle in order to determine the materials needed for a job or project;</u>	
(I)	<u>know how to draw orthographic and isometric views and use them to produce engineering drawings;</u>	
(J)	<u>use cross-sections, including conic sections, of three-dimensional figures to relate to plane figures in specific detail on an engineered drawing;</u>	
(K)	<u>use the vocabulary of geometry in order to explain and use auxiliary views, revolutions, intersections, and engineered drawings.</u>	

(3)	<u>The student applies measurement to all aspects of business and industry occupations. The student is expected to:</u>	
(A)	<u>use dimensional analysis to accurately use an appropriate tool to make measurements;</u>	
(B)	<u>apply accurate readings of measuring devices both US customary and metric to a problem situation;</u>	
(C)	<u>square, measure and cut materials to specified dimensions;</u>	
(D)	<u>use an accurate scale in order to draw segments to scale and measure segments that are drawn to scales;</u>	
(E)	<u>convert temperature values between Celsius and Fahrenheit in situations involving thermodynamics;</u>	
(F)	<u>determine length, distance, area, surface area, volume and weight with appropriate unit labels.</u>	
(4)	<u>The student uses mathematical process with graphical and numerical techniques to study patterns and analyze data related to finance. The student is expected to:</u>	
(A)	<u>use rates and linear functions to solve involving finance and budgeting, including compensations and deductions;</u>	
(B)	<u>solve problems involving taxes;</u>	
(C)	<u>analyze data to make decisions about banking and finance;</u>	
(D)	<u>use mathematical processes with algebraic formulas, numerical techniques and graphs to solve problems related to job cost analysis;</u>	
(E)	<u>identify what parameters to change, such as cost of materials, cost of labor, work time required, to improve the overall cost of a project;</u>	
(F)	<u>identify the most reasonable mathematical solution using estimation.</u>	
(5)	<u>The student applies mathematical processes to design a study and use graphical, numerical and analytical techniques to communicate the results. The student is expected to:</u>	
(A)	<u>interpret situations in terms of given graphs and present situations that fit given graphics;</u>	
(B)	<u>apply Ohm's Law and Kirchhoff's laws to troubleshoot electrical circuits;</u>	
(C)	<u>collect and organize data, make and interpret scatterplots, model, predict and make decisions and critical judgments;</u>	
(D)	<u>prepare technical reports and presentations with visual media or models, including tables, graphs and verbal descriptions.</u>	

<u>(6)</u>	<u>The student applies mathematical principles of manufacturing processes. The student is expected to:</u>	
<u>(A)</u>	<u>identify the line types used on engineering drawings;</u>	
<u>(B)</u>	<u>identify selected symbols commonly used on engineering drawings;</u>	
<u>(C)</u>	<u>identify the components of engineering drawings;</u>	
<u>(D)</u>	<u>read, interpret and create engineering drawings;</u>	
<u>(E)</u>	<u>use proper nomenclature when identifying engineering or manufacturing processes.</u>	

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