

# New Mexico CAREER AND TECHNICAL EDUCATION STANDARDS

## Grades 7-12

### **Strand 1: Academic foundations.**

**Content Standard 1:** Students will achieve the academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities common to all career clusters. Students will:

**7-12 Benchmark 1:** complete required training, education and certification to prepare for employment in a particular career field:

1. identify training, education and certification requirements for one's occupational choice;
2. participate in career-related training or degree programs; and
3. prepare for certification tests to qualify for licensure or certification in a chosen occupational area.

**7-12 Benchmark 2:** demonstrate knowledge and skills in language arts required to pursue the full range of postsecondary education and career opportunities:

1. model behaviors that demonstrate active listening;
2. adapt language for audience, purpose and situation (i.e., choice of diction, structure, style);
3. organize oral and written information;
4. compose well-organized copy for a variety of written documents such as: agendas, speeches and audio-visual presentations, bibliographies, drafts, forms/documents, notes, oral presentations, reports and explanations of technical terminology;
5. edit copy to create well-organized written documents such as: agendas, speeches and audio-visual presentations, bibliographies, drafts, forms/documents, notes, oral presentations, reports and explanations of technical terminology;
6. demonstrate key elements of oral and written information such as: cause/effect, comparisons/contrasts, conclusions, context, purpose, charts/tables/graphs, evaluation/critiques, mood, persuasive text, sequence, summaries and technical subject matter;
7. evaluate oral and written information for: accuracy, adequacy/sufficiency, appropriateness, clarity, conclusions/solutions, fact/opinion, propaganda, relevance, validity and relationship of ideas;
8. identify assumptions, purposes, outcomes/solutions and propaganda techniques in oral and written information;
9. predict potential outcomes or solutions based on oral and written information regarding trends; and
10. present formal and informal speeches including: discussion, information requests, interpretation and persuasive arguments.

**7-12 Benchmark 3:** demonstrate knowledge and skills of mathematics required to pursue the full range of postsecondary education and career opportunities:

1. identify whole numbers, decimals and fractions;
2. demonstrate knowledge of arithmetic operations such as: addition, subtraction, multiplication and division;
3. demonstrate use of relational expressions such as: equal to, not equal, greater than, less than, etc.;

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| <ul style="list-style-type: none"> <li>4. apply data and measurements to solve problems;</li> <li>5. analyze mathematical problem statements for missing or irrelevant data;</li> <li>6. construct charts/tables/graphs from functions and data; and</li> <li>7. analyze data when interpreting operational documents.</li> </ul>                                                                                     |
| <p><b>7-12 Benchmark 4:</b> demonstrate knowledge and skills of science required to pursue the full range of postsecondary and career education opportunities:</p>                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>1. evaluate scientific constructs including: conclusions, conflicting data, controls, data, inferences, limitations, questions, sources of error and variables; and</li> <li>2. apply scientific methods in qualitative and quantitative analysis, data gathering, direct and indirect observation, predictions and problem identification.</li> </ul>                         |
| <p><b>Content Standard 2:</b> Students will develop specific language arts, math and science skills required to pursue pathway opportunities within a career cluster. Students will:</p>                                                                                                                                                                                                                              |
| <p><b>7-12 Benchmark 1:</b> demonstrate knowledge and skills of language arts specific to a career pathway opportunity:</p>                                                                                                                                                                                                                                                                                           |
| <ul style="list-style-type: none"> <li>1. identify types of oral and written opportunities within a selected career cluster;</li> <li>2. comprehend key elements of oral and written information relevant to a selected career pathway; and</li> <li>3. create oral and written representations of communications appropriate to a selected pathway.</li> </ul>                                                       |
| <p><b>7-12 Benchmark 2:</b> demonstrate knowledge and skills of mathematics specific to a career pathway opportunity:</p>                                                                                                                                                                                                                                                                                             |
| <ul style="list-style-type: none"> <li>1. demonstrate knowledge of arithmetic operations needed to succeed within a selected career pathway;</li> <li>2. analyze and summarize data appropriate to a selected pathway; and</li> <li>3. construct charts/tables/graphs from functions and data needed to advance a selected career pathway.</li> </ul>                                                                 |
| <p><b>7-12 Benchmark 3:</b> demonstrate knowledge and skills of science specific to a career:</p>                                                                                                                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>1. apply appropriate scientific methods in qualitative and quantitative analysis, data gathering, direct and indirect observation, predictions and problem identification; and</li> <li>2. understand how scientific discoveries and technological advancements are continually evaluated, validated, revised or rejected in relation to a selected career pathway.</li> </ul> |
| <p><b>Strand 2: Communications.</b></p>                                                                                                                                                                                                                                                                                                                                                                               |
| <p><b>Content Standard 1:</b> Students will use oral and written communication skills in creating, expressing and interpreting information and ideas, including technical terminology and information. Students will:</p>                                                                                                                                                                                             |
| <p><b>7-12 Benchmark 1:</b> select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary:</p>                                                                                                                                                                                                                                                                |

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| <ol style="list-style-type: none"> <li>1. determine the most appropriate reading strategy for identifying the overarching purpose of a text (e.g., skimming, reading for detail, reading for meaning or critical analysis);</li> <li>2. demonstrate use of content, technical concepts and vocabulary when analyzing information and following directions;</li> <li>3. select the reading strategy or strategies needed to fully comprehend the content within a written document (e.g., skimming, reading for detail, reading for meaning or critical analysis);</li> <li>4. interpret information, data and observations to apply information learned from reading to actual practice;</li> <li>5. transcribe information, data and observations to apply information learned from reading to actual practice;</li> <li>6. communicate information, data and observations to apply information learned from reading to actual practice; and</li> <li>7. evaluate the information, explanations or ideas of others by identifying and applying clear, reasonable criteria for evaluation.</li> </ol> |
| <p><b>7-12 Benchmark 2:</b> demonstrate use of the concepts, strategies and systems for obtaining and conveying ideas and information to enhance communication in the workplace:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <ol style="list-style-type: none"> <li>1. employ verbal skills when obtaining and conveying information;</li> <li>2. record information needed to present a report on a given topic or problem;</li> <li>3. write internal and external business correspondence that conveys or obtains information effectively;</li> <li>4. communicate with others to clarify workplace objectives; and</li> <li>5. communicate effectively with others to foster positive relationships.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p><b>7-12 Benchmark 3:</b> locate, organize and reference written information from various sources to communicate with co-workers and clients/participants:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <ol style="list-style-type: none"> <li>1. locate written information used to communicate with co-workers and customers;</li> <li>2. organize information to use in written and oral communications; and</li> <li>3. reference the sources of information.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p><b>7-12 Benchmark 4:</b> evaluate and use information resources to accomplish specific occupational tasks:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <ol style="list-style-type: none"> <li>1. use informational texts, internet web sites and technical materials to review and apply information sources for occupational tasks; and</li> <li>2. evaluate the reliability of information from informational texts, internet web sites and technical materials and resources.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p><b>7-12 Benchmark 5:</b> use correct grammar, punctuation and terminology to write and edit documents:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <ol style="list-style-type: none"> <li>1. compose multi-paragraph documents clearly, succinctly and accurately;</li> <li>2. use descriptions of audience and purpose when preparing and editing written documents; and</li> <li>3. use correct grammar, spelling, punctuation and capitalization when preparing written documents.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p><b>7-12 Benchmark 6:</b> develop and deliver formal and informal presentations using appropriate media to engage and inform audiences:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <ol style="list-style-type: none"> <li>1. prepare oral presentations to provide information for specific purposes and audiences;</li> <li>2. identify support materials that will enhance an oral presentation;</li> <li>3. prepare support materials that will enhance an oral presentation;</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

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| <ul style="list-style-type: none"> <li>4. deliver an oral presentation that sustains listeners' attention and interest;</li> <li>5. align presentation strategies to the intended audience; and</li> <li>6. implement multi-media strategies for presentations.</li> </ul>                                                                                                        |
| <p><b>7-12 Benchmark 7:</b> interpret verbal and nonverbal cues/behaviors to enhance communication with co-workers and clients/participants:</p>                                                                                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>1. interpret verbal behaviors when communicating with clients and co-workers;</li> <li>2. interpret nonverbal behaviors when communicating with clients and co-workers;</li> <li>3. interpret a given verbal message/information; and</li> <li>4. respond with restatement and clarification techniques to clarify information.</li> </ul> |
| <p><b>7-12 Benchmark 8:</b> develop and interpret tables, charts and figures to support written and oral communications:</p>                                                                                                                                                                                                                                                      |
| <ul style="list-style-type: none"> <li>1. create tables, charts and figures to support written and oral communications; and</li> <li>2. interpret tables, charts and figures used to support written and oral communication.</li> </ul>                                                                                                                                           |
| <p><b>7-12 Benchmark 9:</b> listen to and speak with diverse individuals to enhance communication skills:</p>                                                                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>1. apply factors and strategies for communicating with a diverse work force; and</li> <li>2. demonstrate ability to communicate and resolve conflicts within a diverse work force.</li> </ul>                                                                                                                                              |
| <p><b>7-12 Benchmark 10:</b> exhibit public relations skills to increase internal and external customer/client satisfaction:</p>                                                                                                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>1. communicate effectively when developing positive customer/client relationships; and</li> <li>2. identify information related to customer needs.</li> </ul>                                                                                                                                                                              |
| <p><b>Content standard 2: Students will locate, organize and reference written information from various sources to compose and prepare oral and written communications to convey technical concepts and company information. Students will:</b></p>                                                                                                                               |
| <p><b>7-12 Benchmark 1:</b> use writing and organizational skills to construct reports, graphs and tables:</p>                                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>1. compile and arrange information to communicate main facts;</li> <li>2. document sources and references of data;</li> <li>3. organize and arrange information for effective coherence; and</li> <li>4. use appropriate software to develop text, charts, graphs or figures to convey technical concepts.</li> </ul>                      |
| <p><b>7-12 Benchmark 2:</b> identify the main ideas of an informational text and determine the essential elements of the text:</p>                                                                                                                                                                                                                                                |

1. examine informational sources for ideas and concepts;
2. accurately interpret information from and detect inconsistencies in informational sources;
3. read informational and technical texts critically and independently; and
4. analyze the validity of source information.

**7-12 Benchmark 3:** identify and prepare support materials for an oral presentation:

1. identify media and visual aids appropriate to understanding of topic;
2. operate efficiently the equipment associated with presentations; and
3. prepare visual aids and support materials for easy viewing, without error.

### **Strand 3: Problem solving and critical thinking.**

**Content Standard 1: Students will solve problems using critical thinking skills (analyze, synthesize and evaluate) independently and in teams, using creativity and innovation. Students will:**

**7-12 Benchmark 1:** employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate):

1. identify common tasks that require employees/team members to use problem-solving skills;
2. analyze elements of a problem to develop creative solutions;
3. describe the value of using problem-solving and critical thinking skills to improve a situation or process;
4. create ideas, proposals and solutions to problems;
5. evaluate ideas, proposals and solutions to problems;
6. use structured problem-solving methods when developing proposals and solutions;
7. generate new and creative ideas to solve problems by brainstorming possible solutions;
8. critically analyze information to determine value to the problem-solving task;
9. guide individuals through the process of recognizing concerns and making informed decisions;
10. identify alternatives using a variety of problem-solving and critical thinking skills; and
11. evaluate alternatives using a variety of problem-solving and critical thinking skills.

**7-12 Benchmark 2:** employ critical thinking and interpersonal skills to resolve conflicts with staff or customers:

1. analyze situations and behaviors that affect conflict management;
2. determine best options/outcomes for conflict resolution using critical thinking skills;
3. identify with others' feelings, needs and concern;
4. implement stress management techniques;
5. resolve conflicts with/for customers using conflict resolution skills;
6. implement conflict resolution skills to address staff issues/problems;

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| <b>7-12 Benchmark 3:</b> identify, write and monitor workplace performance goals to guide progress in assigned areas of responsibility and accountability:                                                                                                                                                                                                                |
| <ol style="list-style-type: none"> <li>1. write realistic performance goals, objectives and action plans;</li> <li>2. monitor performance goals and adjust as necessary;</li> <li>3. recognize goal achievement using appropriate rewards in the workplace; and</li> <li>4. communicate goal achievement with managers and co-workers.</li> </ol>                         |
| <b>7-12 Benchmark 4:</b> conduct technical research to gather information necessary for decision-making:                                                                                                                                                                                                                                                                  |
| <ol style="list-style-type: none"> <li>1. align the information gathered to the needs of the audience;</li> <li>2. gather technical information and data using a variety of resources;</li> <li>3. analyze information and data for value to the research objectives; and</li> <li>4. evaluate information and data to determine value to research objectives.</li> </ol> |
| <b>Content Standard 2: Students will demonstrate the ability to evaluate and verify the appropriateness of a solution to a problem. Students will:</b>                                                                                                                                                                                                                    |
| <b>7-12 Benchmark 1:</b> understand problem-solving techniques; grades 7-12 performance standards:                                                                                                                                                                                                                                                                        |
| <ol style="list-style-type: none"> <li>1. identify potential problems with a given solution to a problem; and</li> <li>2. demonstrate knowledge of decision-making skills and techniques.</li> </ol>                                                                                                                                                                      |
| <b>7-12 Benchmark 2:</b> study potential, real and perceived emergency situations to recognize and implement appropriate safety and security measures:                                                                                                                                                                                                                    |
| <ol style="list-style-type: none"> <li>1. observe people and surroundings to identify dangerous situations; and</li> <li>2. develop and role-play emergency situations, demonstrating caution and good judgment.</li> </ol>                                                                                                                                               |
| <b>Strand 4: Information technology applications:</b>                                                                                                                                                                                                                                                                                                                     |
| <b>Content Standard 1: Students will use information technology tools specific to the career cluster to access, manage, integrate and create information. Students will:</b>                                                                                                                                                                                              |
| <b>7-12 Benchmark 1:</b> use personal information management (PIM) applications to increase workplace efficiency:                                                                                                                                                                                                                                                         |
| <ol style="list-style-type: none"> <li>1. manage personal schedule and contact information; and</li> <li>2. create memos and notes.</li> </ol>                                                                                                                                                                                                                            |

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| <b>7-12 Benchmark 2:</b> employ technological tools to expedite workflow:                                                                                                                                                                                                                                                         |
| <ol style="list-style-type: none"> <li>1. use information technology tools to manage and perform work responsibilities;</li> <li>2. use email to share files and documents;</li> <li>3. identify the functions and purpose of email systems; and</li> <li>4. use email to communicate within and across organizations.</li> </ol> |
| <b>7-12 Benchmark 3:</b> operate internet applications to perform workplace tasks:                                                                                                                                                                                                                                                |
| <ol style="list-style-type: none"> <li>1. access and navigate internet (e.g., use a web browser);</li> <li>2. search for information and resources; and</li> <li>3. evaluate internet resources for reliability and validity.</li> </ol>                                                                                          |
| <b>7-12 Benchmark 4:</b> operate writing and publishing applications to prepare business communications:                                                                                                                                                                                                                          |
| <ol style="list-style-type: none"> <li>1. prepare simple documents and other business communications;</li> <li>2. prepare reports and other business communications by integrating graphics and other non-text elements; and</li> <li>3. prepare complex multi-media publications.</li> </ol>                                     |
| <b>7-12 Benchmark 5:</b> operate presentation applications to prepare and deliver presentations:                                                                                                                                                                                                                                  |
| <ol style="list-style-type: none"> <li>1. prepare presentations for training, sales and information sharing; and</li> <li>2. deliver presentations with supporting materials.</li> </ol>                                                                                                                                          |
| <b>7-12 Benchmark 6:</b> employ spreadsheet applications to organize and manipulate data:                                                                                                                                                                                                                                         |
| <ol style="list-style-type: none"> <li>1. create a spreadsheet; and</li> <li>2. perform calculations and analyses on data using a spreadsheet.</li> </ol>                                                                                                                                                                         |
| <b>7-12 Benchmark 7:</b> employ database applications to manage data:                                                                                                                                                                                                                                                             |
| <ol style="list-style-type: none"> <li>1. manipulate data elements;</li> <li>2. manage interrelated data elements;</li> <li>3. analyze interrelated data elements; and</li> <li>4. generate reports showing interrelated data elements.</li> </ol>                                                                                |

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| <b>7-12 Benchmark 8:</b> employ computer operations applications to manage work tasks:                                                                                                                                                                                                                                              |
| <ol style="list-style-type: none"> <li>1. manage computer operations;</li> <li>2. manage file storage; and</li> <li>3. compress or alter files.</li> </ol>                                                                                                                                                                          |
| <b>Content Standard 2: Students will recognize and use information technology tools to access, manage, integrate, create and share information within a designated career pathway. Students will:</b>                                                                                                                               |
| <b>7-12 Benchmark 1:</b> use computer-based equipment (containing embedded computers or processors) to control devices:                                                                                                                                                                                                             |
| <ol style="list-style-type: none"> <li>1. operate computer-driven equipment and machines;</li> <li>2. use installation and operation manuals;</li> <li>3. troubleshoot computer-driven equipment and machines; and</li> <li>4. access support as needed to maintain operation of computer-driven equipment and machines.</li> </ol> |
| <b>7-12 Benchmark 2: employ collaborative/groupware applications to facilitate group work; grades 7-12 performance standards:</b>                                                                                                                                                                                                   |
| <ol style="list-style-type: none"> <li>1. facilitate group work through management of shared schedule and contact information;</li> <li>2. facilitate group work through management of shared files and online information; and</li> <li>3. facilitate group work through instant messaging or virtual meetings.</li> </ol>         |
| <b>7-12 Benchmark 3:</b> use installation and operating manuals:                                                                                                                                                                                                                                                                    |
| <ol style="list-style-type: none"> <li>1. install a relevant program using appropriate documentation; and</li> <li>2. access available documentation to solve technology tool problems.</li> </ol>                                                                                                                                  |
| <b>Strand 5: Systems.</b>                                                                                                                                                                                                                                                                                                           |
| Content standard 1: Students will demonstrate understanding of roles within teams, work units, departments, organizations, inter-organizational systems and the larger environment. Students will:                                                                                                                                  |
| <b>7-12 Benchmark 1:</b> describe the nature and types of business organizations to build an understanding of the scope of organizations:                                                                                                                                                                                           |

1. list the types and functions of businesses;
2. describe the types and functions of businesses; and
3. explain the functions and interactions of common departments within a business.

**7-12 Benchmark 2:** implement quality control systems and practices to ensure quality products and services:

1. describe quality control standards and practices common to the workplace; and
2. describe the benefits of using a cross-functional team in policy and procedure development.

**Content Standard 2: Students will identify how key organizational systems and government affect organizational performance and the quality of products and services. Students will:**

**7-12 Benchmark 1:** identify occupation-specific governmental regulations and national, state and local building codes to establish workplace/jobsite regulations and codes:

1. read and discuss information on OSHA, EPA and other safety regulations;
2. apply information given in workplace/building regulations and codes correctly; and
3. obtain, understand and follow material safety data sheets information.

**7-12 Benchmark 2:** identify workplace/jobsite environmental hazards in order to promote workplace/jobsite safety:

1. use hazardous materials safely; and
2. follow safe practices relating to environmental hazards.

**7-12 Benchmark 3:** understand global context of industries and careers:

1. identify mission, organizational goals and objectives of a business;
2. understand the components of a business plan;
3. explain the role of risk-management in reducing risks and improving performance in business; and
4. explain the approaches for managing organizational risks.

**Strand 6: Safety, health and environmental management.**

**Content Standard 1: Students will demonstrate understanding of the importance of health, safety and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. Students will:**

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| <b>7-12 Benchmark 1:</b> implement personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ol style="list-style-type: none"> <li>1. assess workplace conditions with regard to safety and health;</li> <li>2. align safety issues with appropriate safety standards to ensure a safe workplace/jobsite;</li> <li>3. identify safety hazards common to workplaces;</li> <li>4. identify safety precautions to maintain a safe worksite;</li> <li>5. select appropriate personal protective equipment as needed for a safe workplace/jobsite;</li> <li>6. inspect personal protective equipment commonly used for a selected career pathway;</li> <li>7. use personal protective equipment according to manufacturer's rules and regulations;</li> <li>8. employ a safety hierarchy and communication system within the workplace/jobsite; and</li> <li>9. implement safety precautions to maintain a safe worksite.</li> </ol> |
| <b>7-12 Benchmark 2:</b> complete work tasks in accordance with employee rights and responsibilities and employer's obligations to maintain workplace safety and health:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ol style="list-style-type: none"> <li>1. identify rules and laws designed to promote safety and health in the workplace; and</li> <li>2. state the rationale of rules and laws designed to promote safety and health.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>7-12 Benchmark 3:</b> employ emergency procedures as necessary to provide aid in workplace accidents:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ol style="list-style-type: none"> <li>1. use knowledge of first aid procedures as necessary;</li> <li>2. use knowledge of CPR procedures as necessary; and</li> <li>3. use safety equipment as necessary.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>7-12 Benchmark 4:</b> employ knowledge of response techniques to create a disaster or emergency response plan:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <ol style="list-style-type: none"> <li>1. complete an assessment of an emergency or disaster situation; and</li> <li>2. create an emergency or disaster plan.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Content Standard 2: Students will follow organizational policies and procedures and contribute to continuous improvement in performance and compliance. Students will:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>7-12 Benchmark 1:</b> understand health and safety standards and concepts in the workplace:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

1. demonstrate knowledge of the relationship between health, safety and productivity;
2. identify health and safety standards established by government agencies;
3. ensure maintenance of a clean work area; and
4. demonstrate knowledge of ergonomics and repetitive strain injury.

**7-12 Benchmark 2:** implement procedures to protect the health and safety of all individuals:

1. use safety techniques in managing an emergency and ensuring a safe environment; and
2. document and report emergency/crisis situations and outcomes to appropriate authorities.

## **Strand 7: Leadership and team work.**

**Content Standard 1: Students will use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. Students will:**

**7-12 Benchmark 1:** employ leadership skills to accomplish organizational goals and objectives:

1. analyze the various roles of leaders within organizations (e.g. contribute ideas; share in building an organization; act as role models to employees by adhering to company policies, procedures and standards; promote the organization's vision; and mentor others);
2. exhibit traits such as empowerment, risk, communication, focusing on results, decision-making, problem-solving and investment in individuals when leading a group in solving a problem;
3. exhibit traits such as compassion, service, listening, coaching, developing others, team development and understanding and appreciating others when acting as a manager of others in the workplace;
4. exhibit traits such as enthusiasm, creativity, conviction, mission, courage, concept, focus, principle-centered living and flexibility when interacting with others in general;
5. consider issues related to self, team, community, diversity, environment and global awareness when leading others;
6. exhibit traits such as innovation, intuition, adaptation, life-long learning and coach ability to develop leadership potential over time;
7. analyze leadership in relation to trust, positive attitude, integrity and willingness to accept key responsibilities in a work situation;
8. describe observations of outstanding leaders using effective management styles; and
9. participate in civic and community leadership and teamwork opportunities to enhance skills.

**7-12 Benchmark 2:** employ organizational and staff development skills to foster positive working relationships and accomplish organizational goals:

1. implement organizational skills when facilitating others' work efforts;
2. explain how to manage a staff that satisfies work demands while adhering to budget constraints;
3. describe how staff growth and development increase productivity and employee satisfaction;
4. organize team involvement within a group environment;

5. work with others to develop and gain commitment to team goals;
6. distribute responsibility and work load fairly;
7. model leadership and teamwork qualities to aid in employee morale;
8. identify best practices for successful team functioning; and
9. explain best practices for successful team functioning.

**7-12 Benchmark 3:** employ teamwork skills to achieve collective goals and use team members' talents effectively:

1. work with others to achieve objectives in a timely manner;
2. promote the full involvement and use of team member's individual talents and skills;
3. employ conflict-management skills to facilitate solutions;
4. demonstrate teamwork skills though working cooperatively with co-workers, supervisory staff and others, both in and out of the organization, to achieve particular tasks;
5. demonstrate teamwork processes that provide team building, consensus, continuous improvement, respect for the opinions of others, cooperation, adaptability and conflict resolution;
6. develop plans to improve team performance;
7. demonstrate commitment to and a positive attitude toward team goals;
8. take responsibility for shared group and individual work tasks;
9. assist team members in completing their work;
10. adapt effectively to changes in projects and work activities; and
11. negotiate effectively to arrive at decisions.

**7-12 Benchmark 4:** establish and maintain effective working relationships with all levels of personnel and other departments in order to accomplish objectives and tasks:

1. build effective working relationships using interpersonal skills;
2. use positive interpersonal skills to work cooperatively with co-workers representing different cultures, genders and backgrounds;
3. manage personal skills to accomplish assignments;
4. treat people with respect;
5. provide constructive praise and criticism;
6. demonstrate sensitivity to and value for diversity; and
7. manage stress and control emotions.

**7-12 Benchmark 5:** conduct and participate in meetings to accomplish work tasks:

1. develop meeting goals, objectives and agenda;
2. assign responsibilities for preparing materials and leading discussions;
3. prepare materials for leading discussion;
4. assemble and distribute meeting materials;

5. conduct meeting to achieve objectives within scheduled time;
6. demonstrate effective communication skills in meetings;
7. produce meeting minutes, including decisions and next steps; and
8. use parliamentary procedure as needed to conduct meetings.

**7-12 Benchmark 6:** employ mentoring skills to inspire and teach others:

1. use motivational techniques to enhance performance in others; and
2. provide guidance to enhance performance in others.

**Content Standard 2: Students will employ conflict identification and resolution to achieve organizational goals and objectives. Students will:**

**7-12 Benchmark 1:** use conflict resolution skills to maintain a smooth workflow:

1. work collaboratively and cooperatively;
2. give and receive criticism in a diplomatic and constructive manner; and
3. use diplomatic and constructive statements and responses.

**7-12 Benchmark 2:** use human relations skills to work cooperatively with co-workers and foster good relations between different cultures, genders and backgrounds:

1. work effectively with a variety of co-workers;
2. identify team member strengths and weaknesses; and
3. practice motivational techniques.

**Strand 8: Ethics and legal responsibilities.**

**Content Standard 1: Students will know and understand the importance of professional ethics and legal responsibilities. Students will:**

**7-12 Benchmark 1:** apply ethical reasoning to a variety of workplace situations in order to make ethical decisions:

1. evaluate alternative responses to workplace situations based on personal or professional ethical responsibilities;
2. identify personal and long-term workplace consequences of unethical or illegal behaviors;
3. explain personal and long-term workplace consequences of unethical or illegal behaviors;
4. determine the most appropriate response to workplace situations based on legal and ethical considerations; and
5. explain the most appropriate response to workplace situations based on legal and ethical considerations.

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| <b>7-12 Benchmark 2:</b> interpret and explain written organizational policies and procedures to help employees perform their jobs according to employer rules and expectations:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ol style="list-style-type: none"> <li>1. locate information on organizational policies in handbooks and manuals; and</li> <li>2. discuss how specific organizational policies and procedures influence a specific work situation.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Content Standard 2: Students will apply business laws and regulations to business situations. Students will:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>7-12 Benchmark 1:</b> apply laws and regulations to personnel situations:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ol style="list-style-type: none"> <li>1. explain major points and purpose of laws and regulations concerning sexual harassment, gender equity and disabilities;</li> <li>2. identify resources that provide specific information regarding personnel laws and regulations; and</li> <li>3. apply major laws affected in given scenarios/situations.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>7-12 Benchmark 2:</b> apply knowledge of copyright laws to business situations:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <ol style="list-style-type: none"> <li>1. analyze and interpret copyright laws and regulations;</li> <li>2. demonstrate ability to apply copyright laws to specific situations; and</li> <li>3. identify procedures to avoid violation of copyright laws.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Strand 9: Employability and career development.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Content Standard 1: Students will know and understand the importance of employability skills. Students will:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>7-12 Benchmark 1:</b> identify and demonstrate the use of positive work behaviors and personal qualities needed to be employable:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <ol style="list-style-type: none"> <li>1. demonstrate self-discipline, self-worth, positive attitude and integrity in a work situation;</li> <li>2. demonstrate flexibility and willingness to learn new knowledge and skills;</li> <li>3. exhibit commitment to the organization;</li> <li>4. identify how work varies with regard to site, from indoor confined spaces to outdoor areas, including aerial space and a variety of climatic and physical conditions;</li> <li>5. apply communication strategies when adapting to a culturally diverse environment;</li> <li>6. manage resources in relation to the position (e.g., budget, supplies, computer, etc.);</li> <li>7. identify positive work qualities typically desired in each of the career clusters pathways; and</li> <li>8. manage work roles and responsibilities to balance them with other life roles and responsibilities.</li> </ol> |

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| <b>7-12 Benchmark 2:</b> develop a personal career plan to meet career goals and objectives:                                                                                                                                                                                                                                                                                                                                                                                        |
| <ol style="list-style-type: none"> <li>1. develop career goals and objectives as part of a plan for future career direction; and</li> <li>2. develop strategies to reach career objectives.</li> </ol>                                                                                                                                                                                                                                                                              |
| <b>7-12 Benchmark 3:</b> demonstrate skills related to seeking and applying for employment to find and obtain a desired job:                                                                                                                                                                                                                                                                                                                                                        |
| <ol style="list-style-type: none"> <li>1. use multiple resources to locate job opportunities;</li> <li>2. prepare a resumé;</li> <li>3. prepare a letter of application;</li> <li>4. complete an employment application;</li> <li>5. interview for employment; and</li> <li>6. list the standards and qualifications that must be met in order to enter a given industry.</li> </ol>                                                                                                |
| <b>Content Standard 2: Students will explore, plan and effectively manage careers. Students will:</b>                                                                                                                                                                                                                                                                                                                                                                               |
| <b>7-12 Benchmark 1:</b> maintain a career portfolio to document knowledge, skills and experience in a career field:                                                                                                                                                                                                                                                                                                                                                                |
| <ol style="list-style-type: none"> <li>1. select educational and work history highlights to include in a career portfolio;</li> <li>2. produce a record of work experiences, licenses, certifications and products; and</li> <li>3. organize electronic or physical portfolio for use in demonstrating knowledge, skills and experiences.</li> </ol>                                                                                                                                |
| <b>7-12 Benchmark 2:</b> demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals:                                                                                                                                                                                                                                                                                                                   |
| <ol style="list-style-type: none"> <li>1. compare employment opportunities to individual needs and career plan objectives;</li> <li>2. evaluate employment opportunities based upon individual needs and career plan objectives; and</li> <li>3. demonstrate appropriate methods for accepting or rejecting employment offers.</li> </ol>                                                                                                                                           |
| <b>7-12 Benchmark 3:</b> identify and exhibit traits for retaining employment to maintain employment once secured.                                                                                                                                                                                                                                                                                                                                                                  |
| <ol style="list-style-type: none"> <li>1. model behaviors that demonstrate reliability and dependability;</li> <li>2. maintain appropriate dress and behavior for the job to contribute to a safe and effective workplace/jobsite;</li> <li>3. complete required employment forms and documentation such as I-9 form, work visa, W-4 and licensures to meet employment requirements;</li> <li>4. summarize key activities necessary to retain a job in the industry; and</li> </ol> |

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| 5. identify positive work behaviors and personal qualities necessary to retain employment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>7-12 Benchmark 4:</b> identify and explore career opportunities in one or more career pathways to build an understanding of the opportunities available in the cluster:                                                                                                                                                                                                                                                                                                                                                                                                               |
| <ol style="list-style-type: none"> <li>1. locate and identify career opportunities that appeal to personal career goals; and</li> <li>2. match personal interest and aptitudes to selected careers.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                           |
| <b>7-12 Benchmark 5:</b> recognize and act upon requirements for career advancement to plan for continuing education and training:                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <ol style="list-style-type: none"> <li>1. identify opportunities for career advancement;</li> <li>2. pursue education and training opportunities to acquire skills necessary for career advancement;</li> <li>3. examine the organization and structure of various segments of the industry to prepare for career advancement;</li> <li>4. research local and regional labor (work force) market and job growth information to project potential for advancement; and</li> <li>5. manage employment relations to make career advancements.</li> </ol>                                    |
| <b>7-12 Benchmark 6:</b> continue professional development to keep current on relevant trends and information within the industry:                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <ol style="list-style-type: none"> <li>1. use self assessment, organizational priorities, journals, internet sites, professional associations, peers and other resources to develop goals that address training, education and self-improvement issues;</li> <li>2. read trade magazines and journals, manufacturers' catalogues, industry publications and internet sites to keep current on industry trends; and</li> <li>3. participate in relevant conferences, workshops, mentoring activities and in-service training to stay current with recent changes in the field.</li> </ol> |
| <b>7-12 Benchmark 7:</b> examine licensing, certification and credentialing requirements at the national, state and local levels to maintain compliance with industry requirements:                                                                                                                                                                                                                                                                                                                                                                                                      |
| <ol style="list-style-type: none"> <li>1. examine continuing education requirements related to licensing, certification and credentialing requirements at the local, state and national levels for one's chosen occupation;</li> <li>2. examine the procedures and paperwork involved in maintaining and updating licensure, certification and credentials for one's chosen occupation; and</li> <li>3. align ongoing licensing, certification and credentialing requirements to career plans and goals.</li> </ol>                                                                      |
| <b>7-12 Benchmark 8:</b> examine employment opportunities in entrepreneurship to consider entrepreneurship as an option for career planning:                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <ol style="list-style-type: none"> <li>1. describe the opportunities for entrepreneurship in a given industry; and</li> <li>2. identify and explore career opportunities in one or more career pathways.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                      |

**7-12 Benchmark 9:** understand the essential principles of an entrepreneurial organization:

1. practice personal integrity and honesty;
2. interact appropriately and respectfully with diverse ethnic, age, cultural, religious and economic groups in various entrepreneurial and social situations; and
3. exhibit respectful and empathetic behavior when interacting with customers in one-on-one and group situations.

**Strand 10: Technical skills.**

**Content Standard 1: Students will demonstrate the use of technical knowledge and skills required to pursue careers in all career clusters, including knowledge of design, operation and maintenance of technological systems critical to the career cluster. Students will:**

**7-12 Benchmark 1:** employ information management techniques and strategies in the workplace to assist in decision-making:

1. use information literacy skills when accessing, evaluating and disseminating information;
2. describe the nature and scope of information management; and
3. maintain records to facilitate ongoing business operations.

**7-12 Benchmark 2:** employ planning and time management skills and tools to enhance results and complete work tasks:

1. develop goals and objectives;
2. prioritize tasks to be completed;
3. develop timelines using time management knowledge and skills; and
4. use project management skills to improve workflow and minimize costs.

**Content Standard 2: Students will apply and demonstrate technical skills required for career specialties within a selected career pathway. Students will:**

**7-12 Benchmark 1:** understand technical skill requirements within the career field's techniques:

1. obtain industry-recognized certifications where available and appropriate;
2. evaluate industry needs to explain the role and functions of critical industry-related technological systems; and
3. measure and manage the reliability and performance of technological systems to establish use and maintenance guidelines.

**7-12 Benchmark 2:** establish criteria to identify technical skills needed to run an industry efficiently:

1. identify types of skills needed to succeed in a desired industry;
2. explore methods available to develop technical skills; and
3. correctly operate the tools associated with a specific skill.