Maryland
STATE DEPARTMENT OF EDUCATION

# Program of Study Guide: Graphic Communications - DRAFT

Comprehensive guidelines and course standards for the Design and Digital Arts pathway

Office of College and Career Pathways

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## MARYLAND STATE DEPARTMENT OF EDUCATION

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# Purpose

**The purpose of this document is to communicate the required Career and Technical Education (CTE) academic standards for the Digital Arts Program of Study. The academic standards in this document are theoretical and performance based. The standards contain content from multiple state departments of education, the College Board, and the Adobe Certified Professional and have been reviewed and vetted by members of the Maryland business and industry community.**

In addition to academic standards, the Maryland State Department of Education (MSDE) has incorporated into this document Labor Market Information (LMI) definitions and explanations for the Program of Study; program aligned Industry Recognized Credentials; and Work-Based Learning resources and requirements by course level.

# Sources of Standards

The following sources collectively support a progression of technical standards from foundational to advanced digital arts concepts in a high school context, preparing students for industry-aligned certifications like Adobe Premiere Pro Certified Professional and providing them with the necessary knowledge and skills for career readiness in arts, entertainment, and design fields.

1. **Adobe Certified Professional (ACP) Certification Standards**
   A. Description: Adobe Certified Professional certifications validate skills in Adobe Creative Cloud applications, including Photoshop, Illustrator, and InDesign. Each certification assesses proficiency in specific software functionalities, design principles, and project-based applications relevant to industry needs in digital media and graphic design.
   B. Usage: ACP certification standards inform the course objectives and outcomes, helping prepare students for Adobe exams in Photoshop, Illustrator, and InDesign. The standards ensure that students gain the technical skills and software expertise expected in professional graphic design and media production.
   C. Source: Adobe Certified Professional Certification Standards: https://certiport.pearsonvue.com/Certifications/Adobe/ACP/Certify

2. **Adobe Education Exchange**
   A. **Description:** Adobe Education Exchange is a comprehensive platform offering free resources, courses, and teaching materials for educators focused on Adobe products like Photoshop and Illustrator.
   B. **Usage:** The Adobe Education Exchange provides instructors with up-to-date curriculum guides and hands-on project ideas to introduce students to essential Adobe tools and concepts. This resource is valuable for meeting introductory-level competencies and aligns with preparing students for future Adobe certifications.
   C. **Source:** Adobe Education Exchange

3. **Adobe Classroom in a Book**
   A. **Description:** The "Classroom in a Book" series by Adobe Press includes official workbooks offering step-by-step lessons with files for hands-on practice.
   B. **Usage:** These books serve as structured resources for foundational skills equipping students with essential techniques and project-based applications as they start their certification journey.
   C. **Source:** Adobe Press - Classroom in a Book: https://edex.adobe.com/teaching-resources/creative-cloud-digital-classroom-book-with-lesson-files-and-video-tutorials

4. **National Core Arts Standards (NCAS) – Media Arts**
   A. **Description:** The NCAS offers a cohesive set of standards for arts education, including media arts, which encompasses disciplines like graphic design and visual media production. These standards outline essential artistic processes such as creating, presenting, responding, and connecting, tailored to various educational levels.
   B. **Usage:** NCAS standards provide an arts-based foundation for the courses, ensuring that students not only develop technical skills but also engage in creative processes that are essential to the field of graphic design. The standards promote critical thinking and artistic literacy in visual communication.

C. **Source:** National Core Arts Standards – Media Arts: https://www.nationalartsstandards.org/

5. **Adobe Education Exchange for Professional Portfolio Development**
   A. **Description:** Adobe Education Exchange offers resources for portfolio development, client-based projects, and professional branding, including guidance on curating work samples and presenting digital portfolios.
   B. **Usage:** This platform supports capstone experiences by providing projects, tools, and resources that guide students through portfolio refinement, client interaction simulations, and professional presentation techniques.
   C. **Source:** Adobe Education Exchange

6. **Advance CTE - Modernized Career Clusters Framework**
   A. **Description:** The updated Advance CTE Career Clusters® Framework (October 2024) introduces a current structure for Arts, A/V Technology, and Communications, providing a modernized approach to career readiness and skill-building within the graphic communications field.
   B. **Usage:** This framework ensures that the Graphic Communications pathway aligns with current industry standards and career competencies, offering students a comprehensive view of industry expectations and skill development.
   C. **Source:** Advance CTE - Modernized Career Clusters Framework

# Course Descriptions

| Course Level | Course Information | Description |
|---|---|---|
| Required Core: Course 1 | Graphic Communications I<br>SCED: <XX><br>Grades: 9-12<br>Prerequisite: None<br>Credit: 1 | This introductory course introduces students to the foundational skills and concepts in graphic communications, covering design principles, visual composition, and the basics of industry-standard software such as Adobe Photoshop and Illustrator. |
| Required Core: Course 2 | Graphic Communications II<br>SCED: <XX><br>Grades: 10-12<br>Prerequisite: Graphic Communications I<br>Credit: 1 | Building on the foundations of Graphic Communications I, this course deepens students' skills in digital imaging, advanced photo editing, and vector-based design using Adobe Photoshop and Illustrator. |
| Optional Flex: Course 1 | Graphic Communications III<br>SCED: <XX><br>Grades: 11-12<br>Prerequisite: Digital I and II<br>Credit: 1 | In Graphic Communications III, students advance their skills in layout design, prepress preparation, and publication techniques, with a focus on Adobe InDesign. They will create multi-page documents, manage complex typography, and use interactive elements for both digital and print media. |
| Optional Flex: Course 2 | Career Connected Learning I<br><br>SCED: <XX><br>Grades: 11-12<br>Prerequisite: Graphic Communication I and II<br>Credit: 1 | This flexible, work-based learning course introduces students to real-world applications of classroom knowledge and technical skills through on-the-job experiences and reflective practice. Students engage in career exploration, skill development, and professional networking by participating in youth apprenticeships, registered apprenticeships, pre-apprenticeships, internships, capstone projects, or other approved career-connected opportunities. Variable credit (1–3) accommodates the required on-the-job training hours and related instruction. By integrating industry standards, employability skills, and personalized learning goals, Career Connected Learning I equips students to make informed career decisions, develop a professional portfolio, and build a strong foundation for success in postsecondary education, training, or the workforce. |

| | | |
|---|---|---|
| Optional Flex: Course 3 | Career Connected Learning II<br><br>SCED: <XX><br>Grades: 11-12<br>Prerequisite: Career Connected Learning I<br>Credit: 1 | Building on the foundational experiences of Career Connected Learning I, this advanced work-based learning course provides students with deeper on-the-job practice, leadership opportunities, and refined career exploration. Students continue to enhance their technical and professional skills, expanding their industry networks and aligning personal goals with evolving career interests. Variable credit (1–3) remains aligned with the required training hours and related instruction. Through elevated responsibilities and skill application, Career Connected Learning II prepares students to confidently transition into higher-level postsecondary programs, apprenticeships, or the workforce. |

***Dual Enrollment and Career Connected Learning Experiences Must be Aligned to the CTE Core.***

# Industry-Recognized Credentials and Work-Based Learning

| **Industry-Recognized Credentials – The standards in this document are aligned to the following certifications:** |
|---|
| **By the end of Graphic Communications II:** Adobe Certified Professional in Photoshop and Adobe Certified Professional in Illustrator<br><br>**Optional Credentials (via the Flex Course options):** Adobe Certified Professional in In-Design. |

| **Work-Based Learning Examples and Resources** | | |
|---|---|---|
| **Graphic Communications I: Career Awareness** | **Graphic Communications II: Career Preparation** | **Flex Courses: Career Preparation** |
| • Industry Visits<br>• Guest Speakers<br>• Participation in Career and Technical Student Organizations<br>• Postsecondary Visits – Program Specific Site Tours<br>• Mock Interviews | • All of Career Awareness plus the following:<br>• Job Shadow<br>• Paid and Unpaid Internships | • Paid and Unpaid Internships<br>• Apprenticeships |

# Labor Market Information: Definitions and Data

Labor market information (LMI) plays a crucial role in shaping Career and Technical Education (CTE) programs by providing insights into industry demands, employment trends, and skills gaps. This data helps education leaders assess the viability of existing programs and identify opportunities for new offerings. By aligning CTE programs with real-time labor market needs, schools can better prepare students for in-demand careers and ensure that resources are effectively used to support pathways that lead to high-quality, sustainable employment.

**Standard Occupational Code (SOC) and Aligned Industry:**

| Indicator | Definition | Pathway Labor Market Data |
|---|---|---|
| **High Wage**[1] | Those occupations that have a 25th percentile wage equal to or greater than the most recent MIT Living Wage Index for one adult in the state of Maryland, and/or leads to a position that pays at least the median hourly or annual wage for the DC-VA-MD-WV Metropolitan Statistical Area (MSA).<br><br>*Note: A 25th percentile hourly wage of $24.74 or greater is required to meet this definition.* | **Standard Occupational Code:**<br>27-1024: Graphic Designers<br><br>**Hourly Wage/Annual Salary:**<br>25th Percentile: $22.74 / $47,299.00<br>50th Percentile: $30.41 / $63,253.00<br>75th Percentile: $39.90 / $82,992.00 |
| **High Skill** | Those occupations located within the DC-VA-MD-WV Metropolitan Statistical Area (MSA) with the following education or training requirements: completion of an apprenticeship program; completion of an industry-recognized certification or credential; associate's degree, bachelor's degree, or higher. | **Typical Entry-Level Education:**<br><br>Graphic designers typically need a bachelor's degree in graphic design or a related fine arts field. People who have a bachelor's degree in another field may complete technical training in graphic design to meet most hiring qualifications. |
| **In-Demand** | Annual growth plus replacement, across all Maryland occupations, is 405 openings between 2024-2029. | **Annual Openings** |

[1] Living Wage Calculator: https://livingwage.mit.edu/states/24

**Labor Market Information Data Source**

Lightcast Q4 2024 Data Set. Lightcast occupation employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates are also affected by county-level Lightcast earnings by industry. Foundational data for the state of Maryland is collected and reported by the Maryland Department of Labor.

**Methodology for High Wage Calculations**

To combine labor market data across multiple Standard Occupational Classifications (SOCs), a weighted average approach was used to ensure accurate representation of the marketplace. Median wages for each SOC were weighted based on their respective employment levels, reflecting the relative demand for each occupation. This method ensures that occupations with higher employment contribute proportionately to the overall wage calculation. Additionally, job openings from all relevant SOCs were summed to determine the total projected demand. For example, if Mechanical Engineers account for 67% of total employment and Electrical Engineers for 33%, their respective wages are weighted accordingly, and job openings are aggregated to provide a comprehensive view of labor market opportunities. This approach delivers a balanced and accurate representation of both wages and employment demand for the program.

**Methodology for In-Demand Calculations**

The baseline for annual job openings, taking into account new positions and replacement positions, was determined by taking the average of all annual job openings between 2024 and 2029 across all 797 career sectors at the 5-digit SOC code level. For the 2024-2029 period, average job openings (growth + replacement) is 405.

# Course Standards: Graphic Communications I

1. **GENERAL REQUIREMENTS.** This course is recommended for students in Grades 9-12.

2. **INTRODUCTION**
   A. Career and Technical Education (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.
   B. The Arts, Entertainment and design Career Cluster combines creative roles in visual and performing arts, film, journalism, fashion, interior design, and creative technologies. This Cluster focuses on creating, producing, and sharing artistic and design work across multiple platforms, aiming to entertain, inform, beautify, and inspire.
   C. The Graphic Communications program of study careers encompasses the creation and production of visually engaging digital content such as visual marketing, graphic design, augmented and virtual reality, web design, and user interfaces/user experiences. This program of study combines artistic talent and technology to produce interactive content, entertainment, commercial product and packaging design, and promotional materials.
   D. Graphic Communications I is an introductory course within the Arts, Entertainment, and Design Career Cluster, aimed at high school students exploring foundational skills in digital content creation and production. This course immerses students in the creative processes and technical skills necessary to produce visually engaging digital content across various platforms. Students will learn to conceptualize, design, and edit projects using industry-standard tools such as Adobe Premiere Pro, Photoshop, and Illustrator, building a portfolio of work that includes elements of visual marketing, graphic design, web design, and user interfaces.
   E. Students will participate in at least two Career-Connected Education and Work-Based Learning experiences in this course, which might include informational interviews or job shadowing relevant to the program of study.
   F. Students are encouraged to participate in extended learning experiences through aligned Career and Technical Student Organizations (CTSOs). CTSOs are a cocurricular requirement in the Carl D. Perkins Act, and alignment to CTSO activities is an expectation for CTE programs in the state of Maryland.

3. **KNOWLEDGE AND SKILLS**
   A. **The student demonstrates the necessary skills for career development, maintenance of employability, and successful completion of course outcomes. The student is expected to:**
      1. Identify and demonstrate positive work behaviors that enhance employability and job advancement, such as regular attendance, promptness, proper attire, maintenance of a clean and safe work environment, and pride in work.
      2. Demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, active listening, and a willingness to learn.
      3. Employ effective reading, writing, and technical documentation skills.
      4. Solve problems using critical thinking techniques and structured troubleshooting methodologies.
      5. Demonstrate leadership skills and collaborate effectively as a team member.
      6. Implement safety procedures, including proper use of software and following privacy guidelines.

7. Exhibit an understanding of legal and ethical responsibilities in the Graphic Communications field, following data privacy laws and best practices for security.
8. Demonstrate time-management skills and the ability to prioritize tasks in a technical setting.

B. **The student identifies various career pathways in the Graphic Communications field. The student is expected to:**
   1. Develop a career plan that includes the necessary education, certifications, job skills, and experience for specific roles in Graphic Communications.
   2. Create a professional resume and portfolio that reflect skills, projects, certifications, and recommendations.
   3. Demonstrate effective interview skills for roles in media and graphic communications.

C. **The student develops technology and digital literacy skills. The student is expected to:**
   1. Use industry-standard design software such as Adobe Photoshop, Illustrator, and InDesign to create, edit, and publish digital and print-ready visual content.
   2. Apply effective file management techniques, including organizing project files, maintaining version control, and adhering to proper naming conventions to enhance workflow and collaboration.
   3. Demonstrate proficiency in using digital tools for prepress preparation, including color management, resolution adjustments, and setting up files for print and digital distribution.
   4. Create interactive and multimedia projects by integrating hyperlinks, navigation elements, and multimedia components to design user-focused digital publications.
   5. Evaluate design projects through the use of critical thinking and problem-solving skills, utilizing feedback, industry standards, and design principles to refine and improve work.
   6. Develop a professional online and print portfolio using digital platforms and tools to showcase technical skills, creativity, and industry-aligned competencies for career readiness.

D. **The student integrates core academic skills into Graphic Communications practices. The student is expected to:**
   1. Integrate English language arts skills, such as writing informative texts, crafting project descriptions, and delivering oral presentations, to articulate design concepts and processes effectively.
   2. Apply mathematical principles, including scaling, ratios, geometry, and proportional reasoning, to accurately size, align, and format digital and print design elements.
   3. Analyze design projects using critical thinking skills, evaluating visual components for effectiveness, audience engagement, and adherence to industry standards.
   4. Incorporate scientific concepts, such as color theory and light behavior, to manage color models, gradients, and visual effects in digital and print media.

E. **The student demonstrates foundational skills in graphic communications. The student is expected to:**
   1. Explain the elements and principles of design and their role in visual composition.
   2. Identify and describe various career pathways in graphic design and printing, including their associated skills and competencies.

F. **The student demonstrates the necessary skills to use Adobe Photoshop at an introductory level. The student is expected to:**
   1. Demonstrate basic photo editing techniques, including cropping, resizing, and color correction.
   2. Use layers and layer masks to manage image composition.
   3. Apply image enhancement tools such as the clone stamp, healing brush, and filters to adjust images for clarity and emphasis.

G. **The student explores vector-based design using Adobe Illustrator tools. The student is expected to:**
   1. Create simple vector graphics, including logos and icons, utilizing basic shape and path tools.
   2. Demonstrate the use of colors, gradients, and fills to enhance vector images.
   3. Use text tools and formatting to incorporate typography into designs.

H. **The student develops an understanding of the printing process and its applications. The student is expected to:**
   1. Explain the fundamentals of print design, including color models (RGB vs. CMYK) and resolution requirements for print versus digital media.
   2. Identify common printing methods and equipment used in the graphic communications industry.
   3. Apply basic concepts of layout and composition relevant to print media, including margins, bleed, and safe zones.

# Course Standards: Graphic Communications II

1. **GENERAL REQUIREMENTS.** This course is recommended for students in Grades 10-12.

2. **INTRODUCTION**
   A. Career and Technical Education (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.
   B. The Arts, Entertainment and Design Career Cluster combines creative roles in visual and performing arts, film, journalism, fashion, interior design, and creative technologies. This Cluster focuses on creating, producing, and sharing artistic and design work across multiple platforms, aiming to entertain, inform, beautify, and inspire.
   C. The Graphic Communications program of study careers encompasses the creation and production of visually engaging digital content such as visual marketing, graphic design, augmented and virtual reality, web design, and user interfaces/user experiences. This program of study combines artistic talent and technology to produce interactive content, entertainment, commercial product and packaging design, and promotional materials.
   D. Graphic Communications II builds on the foundational skills acquired in Graphic Communications I, advancing students' abilities in digital content creation, design, and multimedia production. Positioned within the Arts, Entertainment, and Design Career Cluster, this course enables students to deepen their expertise in producing visually dynamic content across various media platforms, with an emphasis on creative technologies and interactive design. Students engage in more complex projects involving graphic design, motion graphics, augmented reality, and user experience/user interface (UX/UI) design, gaining insights into professional workflows and creative problem-solving.
   E. Students will participate in at least two Career-Connected Education and Work-Based Learning experiences in this course, which might include informational interviews or job shadowing relevant to the program of study.
   F. Students are encouraged to participate in extended learning experiences through aligned Career and Technical Student Organizations (CTSOs). CTSOs are a cocurricular requirement in the Carl D. Perkins Act, and alignment to CTSO activities is an expectation for CTE programs in the state of Maryland.

3. **KNOWLEDGE AND SKILLS**
   A. **The student demonstrates the necessary skills for career development, maintenance of employability, and successful completion of course outcomes. The student is expected to:**
      1. Identify and demonstrate positive work behaviors that enhance employability and job advancement, such as regular attendance, promptness, proper attire, maintenance of a clean and safe work environment, and pride in work.
      2. Demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, active listening, and a willingness to learn.
      3. Employ effective reading, writing, and technical documentation skills.
      4. Solve problems using critical thinking techniques and structured troubleshooting methodologies.
      5. Demonstrate leadership skills and collaborate effectively as a team member.
      6. Implement safety procedures, including proper use of software and following privacy guidelines.

7. Exhibit an understanding of legal and ethical responsibilities in the Graphic Communications field, following data privacy laws and best practices for security.
8. Demonstrate time-management skills and the ability to prioritize tasks in a technical setting.

B. **The student identifies various career pathways in the Graphic Communications field. The student is expected to:**
   1. Develop a career plan that includes the necessary education, certifications, job skills, and experience for specific roles in Graphic Communications.
   2. Create a professional resume and portfolio that reflect skills, projects, certifications, and recommendations.
   3. Demonstrate effective interview skills for roles in media and graphic communications.

C. **The student develops technology and digital literacy skills. The student is expected to:**
   1. Use industry-standard design software such as Adobe Photoshop, Illustrator, and InDesign to create, edit, and publish digital and print-ready visual content.
   2. Apply effective file management techniques, including organizing project files, maintaining version control, and adhering to proper naming conventions to enhance workflow and collaboration.
   3. Demonstrate proficiency in using digital tools for prepress preparation, including color management, resolution adjustments, and setting up files for print and digital distribution.
   4. Create interactive and multimedia projects by integrating hyperlinks, navigation elements, and multimedia components to design user-focused digital publications.
   5. Evaluate design projects through the use of critical thinking and problem-solving skills, utilizing feedback, industry standards, and design principles to refine and improve work.
   6. Develop a professional online and print portfolio using digital platforms and tools to showcase technical skills, creativity, and industry-aligned competencies for career readiness

D. **The student integrates core academic skills into Graphic Communications practices. The student is expected to:**
   1. Integrate English language arts skills, such as writing informative texts, crafting project descriptions, and delivering oral presentations, to articulate design concepts and processes effectively.
   2. Apply mathematical principles, including scaling, ratios, geometry, and proportional reasoning, to accurately size, align, and format digital and print design elements.
   3. Analyze design projects using critical thinking skills, evaluating visual components for effectiveness, audience engagement, and adherence to industry standards.
   4. Incorporate scientific concepts, such as color theory and light behavior, to manage color models, gradients, and visual effects in digital and print media.

E. **The student demonstrates advanced skills in graphic design and digital imaging. The student is expected to:**
   1. Apply advanced photo editing and manipulation techniques in Adobe Photoshop, such as blending modes, advanced selections, and non-destructive editing.
   2. Create complex compositions using multiple layers, masks, and adjustment layers to enhance image quality and visual appeal.

3. Use vector graphics for advanced design work in Adobe Illustrator, applying skills such as pathfinding, custom shapes, and typography.

F. **The student prepares for industry-recognized certification in Adobe Photoshop or Illustrator. The student is expected to:**
   1. Complete projects that replicate real-world graphic design tasks, preparing for Certiport's Adobe Certified Professional exams.
   2. Demonstrate the ability to export and prepare files for both digital and print media, understanding resolution, color models, and file types.
   3. Develop a portfolio that showcases technical proficiency and creativity in Adobe Photoshop or Illustrator, with projects demonstrating professional-level quality.

G. **The student develops proficiency in digital and print design principles. The student is expected to:**
   1. Apply principles of visual hierarchy, balance, and alignment in multi-page documents and single-page designs.
   2. Explore layout design for print media, including magazine spreads, posters, and brochures, utilizing design grids and master pages.
   3. Use color theory in design projects, including monochromatic, analogous, and complementary color schemes, to enhance visual impact.
   4. Analyze and critique design works, applying knowledge of design principles, audience considerations, and branding consistency.

H. **The student demonstrates knowledge of printing processes and prepress preparation. The student is expected to:**
   1. Prepare documents for print by setting up bleeds, margins, and crop marks and ensuring color accuracy through CMYK color management.
   2. Identify and troubleshoot common printing issues, such as color shift, bleed errors, and resolution discrepancies.
   3. Understand and apply knowledge of various printing methods, including digital, offset, and screen printing, and identify their appropriate uses.

# Course Standards: Graphic Communications III

1. **GENERAL REQUIREMENTS.** This course is recommended for students in Grades 10-12.

2. **INTRODUCTION**
   A. Career and Technical Education (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.
   B. The Arts, Entertainment and Design Career Cluster combines creative roles in visual and performing arts, film, journalism, fashion, interior design, and creative technologies. This Cluster focuses on creating, producing, and sharing artistic and design work across multiple platforms, aiming to entertain, inform, beautify, and inspire.
   C. The Graphic Communications program of study careers encompasses the creation and production of visually engaging digital content such as visual marketing, graphic design, augmented and virtual reality, web design, and user interfaces/user experiences. This program of study combines artistic talent and technology to produce interactive content, entertainment, commercial product and packaging design, and promotional materials.
   D. Graphic Communications III deepens students' expertise in advanced creative and technical skills, focusing on post-production, motion graphics, and complex visual effects. Students explore techniques in compositing, advanced color correction, and 3D effects using tools like Adobe After Effects and Avid Media Composer.
   E. Students will participate in at least two Career-Connected Education and Work-Based Learning experiences in this course, which might include informational interviews or job shadowing relevant to the program of study.
   F. Students are encouraged to participate in extended learning experiences through aligned Career and Technical Student Organizations (CTSOs). CTSOs are a cocurricular requirement in the Carl D. Perkins Act, and alignment to CTSO activities is an expectation for CTE programs in the state of Maryland.

3. **KNOWLEDGE AND SKILLS**
   A. **The student demonstrates the necessary skills for career development, maintenance of employability, and successful completion of course outcomes. The student is expected to:**
      1. Identify and demonstrate positive work behaviors that enhance employability and job advancement, such as regular attendance, promptness, proper attire, maintenance of a clean and safe work environment, and pride in work.
      2. Demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, active listening, and a willingness to learn.
      3. Employ effective reading, writing, and technical documentation skills.
      4. Solve problems using critical thinking techniques and structured troubleshooting methodologies.
      5. Demonstrate leadership skills and collaborate effectively as a team member.
      6. Implement safety procedures, including proper use of software and following privacy guidelines.
      7. Exhibit an understanding of legal and ethical responsibilities in the Graphic Communications field, following data privacy laws and best practices for security.
      8. Demonstrate time-management skills and the ability to prioritize tasks in a technical setting.

B. **The student identifies various career pathways in the Graphic Communications field. The student is expected to:**
   1. Develop a career plan that includes the necessary education, certifications, job skills, and experience for specific roles in Graphic Communications.
   2. Create a professional resume and portfolio showcasing skills and projects that meet certification requirements, emphasizing layout and design accuracy.
   3. Demonstrate effective interview skills for roles in media and graphic communications.

C. **The student develops technology and digital literacy skills. The student is expected to:**
   1. Use industry-standard design software such as Adobe Photoshop, Illustrator, and InDesign to create, edit, and publish digital and print-ready visual content.
   2. Apply effective file management techniques, including organizing project files, maintaining version control, and adhering to proper naming conventions to enhance workflow and collaboration.
   3. Demonstrate proficiency in using digital tools for prepress preparation, including color management, resolution adjustments, and setting up files for print and digital distribution.
   4. Create interactive and multimedia projects by integrating hyperlinks, navigation elements, and multimedia components to design user-focused digital publications.
   5. Evaluate design projects through the use of critical thinking and problem-solving skills, utilizing feedback, industry standards, and design principles to refine and improve work.
   6. Develop a professional online and print portfolio using digital platforms and tools to showcase technical skills, creativity, and industry-aligned competencies for career readiness

D. **The student integrates core academic skills into Graphic Communications practices. The student is expected to:**
   1. Integrate English language arts skills, such as writing informative texts, crafting project descriptions, and delivering oral presentations, to articulate design concepts and processes effectively.
   2. Apply mathematical principles, including scaling, ratios, geometry, and proportional reasoning, to accurately size, align, and format digital and print design elements.
   3. Analyze design projects using critical thinking skills, evaluating visual components for effectiveness, audience engagement, and adherence to industry standards.
   4. Incorporate scientific concepts, such as color theory and light behavior, to manage color models, gradients, and visual effects in digital and print media.

E. **The student demonstrates advanced skills in layout design and publication. The student is expected to:**
   1. Create complex, multi-page layouts using Adobe InDesign, including setting up master pages, grids, and custom style sheets.
   2. Incorporate typography effectively, utilizing advanced text formatting, kerning, and leading to enhance readability and aesthetic appeal.
   3. Use interactive elements in layouts, such as hyperlinks, buttons, and multimedia, to design content for both digital and print media.
   4. Analyze and evaluate visual media, using knowledge of branding, audience engagement, and user experience.

F. **The student prepares for industry-recognized certification in Adobe InDesign. The student is expected to:**
   1. Complete projects that reflect industry standards for Adobe Certified Professional certification in InDesign, including real-world applications like brochures, reports, and digital publications.
   2. Demonstrate proficiency in exporting files for various formats, understanding preflight checks, and ensuring print-ready quality.

G. **The student explores advanced print production techniques and prepress procedures. The student is expected to:**
   1. Apply advanced color management techniques to ensure color consistency across digital and print formats.
   2. Use preflight tools to identify and correct file errors, such as font issues, bleed inconsistencies, and resolution problems before printing.
   3. Understand the roles and processes within print production environments, including proofing, plate preparation, and quality control.

H. **The student begins preparation for a capstone experience by developing a professional portfolio. The student is expected to:**
   1. Select and refine work samples to build a cohesive portfolio that demonstrates technical skills and creativity in layout design, typography, and digital media.
   2. Incorporate feedback from peers and mentors to improve portfolio quality and presentation.
   3. Create project summaries and reflective statements for each piece in the portfolio, articulating design decisions and technical methods used.

# Course Standards: Career Connected Learning I and II

**Career connected learning is an educational approach that integrates classroom instruction with real-world experiences, enabling high school students to explore potential careers and develop relevant skills before graduation. By participating in work-based learning opportunities—such as apprenticeships, internships, capstone projects, and school-based enterprises—students apply academic concepts in authentic settings, gain practical industry knowledge, and build professional networks. This hands-on engagement helps students connect their studies to future career paths, strengthens their problem-solving and communication skills, and supports a smoother transition into college, vocational programs, or the workforce.**

All Career and Technical Education Programs of Study include aspects of work-based learning, and almost all of the programs include two Career Connected Learning (CCL) courses. Below are the course descriptions for CCL I and CCL II. The CCL standards can be found via this link: