



Commercial Interior Design

Primary Career Cluster:	Architecture & Construction
Course Contact:	CTE.Standards@tn.gov
Course Code(s):	C17H20
Prerequisite(s):	<i>Residential Interior Design</i> (C17H11)
Credit:	1
Grade Level:	11
Elective Focus - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Architecture & Construction courses.
POS Concentrator:	This course satisfies one out of two required courses that meet the Perkins V concentrator definition, when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the third course in the <i>Interior Design</i> program of study.
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/content/tn/education/career-and-technical-education/work-based-learning.html .
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/career-and-technical-education/student-industry-certification.html
Teacher Endorsement(s):	050, 051, 154, 450, 954
Required Teacher Certifications/Training:	None
Teacher Resources:	https://www.tn.gov/education/career-and-technical-education/career-clusters/cte-cluster-architecture-construction.html Best for All Central: https://bestforall.tnedu.gov/

Course at a Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st century skills necessary to be successful in career and in life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards which feed into intentionally designed programs of study.

Students engage in industry relevant content through general education integration and experiences such as career & technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry standard content and technology, solve industry-based problems, meaningfully interact with industry professionals and use/produce industry specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for your students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course, note this is not an exhaustive list.

- Participate in CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration. These include Career Investigation, Job Interview, Leadership, and Interior Design.

Using a Work-based Learning (WB) in Your Classroom

Sustained and coordinated activities that relate to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standards 2-3** | Integrate project with a professional.
- **Standard 4** | Guest speaker.
- **Standards 5-10** | Have the students do a project that is useful to a local employer. Ask the manager to help evaluate the projects.
- **Standards 13-16** | Ask an industry rep to discuss textiles.
- **Standards 17-18** | Ask an industry manager to discuss project management.
- **Standards 19-21** | Take the students to a real project meeting to watch a presentation board being presented to a client.

Course Description

Commercial Interior Design is the third course in the *Interior Design* program of study intended to prepare students for careers in residential and commercial interior design. Important components in this course include developing an understanding of specifications for commercial design, building technology, building codes, product applications, and product testing research and development. Students will work individually and in teams to make presentations to prospective commercial clients and defend their designs and presentation boards. Upon completion of this course, proficient students will be able to create three-dimensional pictorial representations of objects by way of size, shape, shading, and color using industry-standard software programs.

Program of Study Application

This is the third course in the *Interior Design* program of study. For more information on the benefits and requirements of implementing this program in full, please visit the Architecture & Construction website at <https://www.tn.gov/education/career-and-technical-education/career-clusters/cte-cluster-architecture-construction.html>.

Course Standards

Safety

- 1) Demonstrate the ability to comply with personal and environmental safety practices associated with interior design applications, such as the use of adhesives, hand tools, machines, and appropriate handling and storage methods in accordance with local, state, and federal safety and environmental regulations.
 - a. Inspect, maintain, and employ safe operating procedures with tools.
 - b. Adhere to responsibilities, regulations, and Occupational Safety & Health Administration (OSHA) policies regarding reporting of accidents and observed hazards, and regarding emergency response procedures.
 - c. Maintain a portfolio record of written safety examinations and equipment examination for which the student has passed an operational checkout by the instructor.

Design Software

- 2) Use computer-aided software tools to design floor plans or create perspective drawings using appropriate symbols, abbreviations, and call outs to indicate placement of windows, doors, electrical outlets, plumbing, and other structures.
- 3) Apply textures, color, and finishes to elevations and perspective drawings. Use layers and overlays to demonstrate alternate designs of the same structures.

Commercial Design

- 4) Research and compare the fields of residential interior design to commercial interior design. Integrate the information into a research project including a written report and class

presentation, demonstrating an understanding of the differences and similarities among residential and commercial interior design careers.

- 5) Review and evaluate design interiors of commercial spaces presented in diverse formats such as design books and building magazines. After review, create and continuously log sketches and gather sample pictures of appealing furniture layout, window treatments, accessories, and floorings for inclusion in future design projects. Compile sketches and sample pictures into a personal design book along with a brief paragraph to accompany each sketch, describing what aspects of the design are appealing and why.
- 6) Research the various material used in the exterior rendering. Design a commercial building rendering by sketching the exterior with a three-dimensional design program. Then sketch the exterior facade, attending to appropriate representations for metal, wood, brick, glass, or any combination of exterior materials. Compile the sketches and other artifacts for inclusion in the design portfolio, along with a written defense of the material choices, citing evidence of the material's durability, practicality, cost effectiveness, and sustainability.
- 7) Research the placement of furniture and arrangement of interiors for commercial spaces. Generate floor plans that incorporate effective commercial space planning techniques. Write a short narrative to accompany the drawings, highlighting the design principles illustrated in each.
- 8) Research space requirements, traffic flow, and design features necessary for a commercial space. Create a rendering and assemble a three-dimensional interior design for the space, demonstrating effective use of principles and elements of design learned in previous courses. The design should be specific to a particular venue, such as but not limited to:
 - a. Hospitality venues (i.e., restaurants, hotels, event spaces)
 - b. Offices
 - c. Spas or fitness centers
 - d. Retail space
- 9) Research field verifications in the context of client project analysis and produce a synthesis of how interior designers incorporate field verification data to best meet the client needs. Prepare a written plan or proposal for conducting field verification analysis for the commercial venue selected in standard 7, including a proposed timeline with key deliverables to present to a mock client.
- 10) Conduct an original field verification analysis to determine materials, layout, space distribution, and interior walls arrangement needed for the commercial venue project in standard 7.

Policies and Regulations

- 11) Research relevant legislation, regulations, zoning laws, and building codes regulating environmental, health, and safety requirements for specific commercial facilities. Create a series of informative or explanatory texts that clearly and accurately convey the minimum compliance requirements and benchmarks needed to achieve an energy-efficient building

designation.

- 12) Research how Universal/Barrier Free design principles impact commercial design. Identify modifications that are necessary to furnishings, floor plans, materials, and fixtures to accommodate the needs of people of all ages and physical abilities in compliance with the Americans with Disabilities Act (ADA). Analyze photos of commercial spaces to determine the universal/barrier free design principles that were used and write narrative about their usefulness for the elderly, children, or people with physical limitations.

Textiles

- 13) Research and create a chart of natural and manmade fibers, and the textiles made from them, as they are used in commercial applications such as draperies, carpets, and upholstery. Describe in the chart the principle characteristics, best applications for the fibers/textiles, care guidelines, and any associated environmental or safety concerns. Expand the chart to prepare a more detailed guide including samples to be used in presentations to clients.
- 14) Research *ASTM D4850 -13* for standard terminology relating to fabrics and fabric test methods. Limit the search to textiles used in interior furnishings. Create a chart summarizing the broad classifications of tests performed on textiles, the standards organizations that have developed methods for testing each characteristic, and any additional information that describes the test method, application, reliability, and interpretation of the results.
- 15) Differentiate between the Wyzenbeek and Martindale Abrasion Tests. Evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence supporting the abrasion rating. Develop guidelines for choosing fabrics for specific residential or commercial applications that indicates the number of double rubs (Wyzenbeek) or cycles (Martindale) a fabric should withstand.
- 16) In small groups, follow the scientific method to develop protocol to test for some characteristic of fabric, upholstery, or carpet materials, such as fade resistance, durability, or shrink resistance. Follow the protocol and laboratory test fabric samples.

Project Management

- 17) Create an outline that illustrates the basic components of project budgets commonly used in commercial interior design proposals (e.g., itemized budgets, non-itemized budgets, fixed budgets, and flexible budgets). Implement outline components to generate a comprehensive budget including walls and floors, lighting, focal furniture pieces, and labor costs for a commercial office space.
- 18) Examine how commercial designers conduct project management processes including but not limited to adhering to local building codes, obtaining building permits, and coordinating with construction professionals and clients. Compare and contrast components of project management models gathered from case studies of major or local commercial designers.

Generate a project management template that addresses the objectives required for designing a commercial office space.

Presentation Boards

- 19) Compile a list of materials required for a presentation board featuring a commercial setting. Incorporate a wide range of material samples. Evaluate these elements visually and tactually to determine the most effective combination that will meet the needs of the client.
- 20) Analyze the material samples to select those suitable for a specific type of commercial design setting. Create the presentation board in a collage of color samples, fabric, and flooring, mounted with the color elevation rendering that orderly and logically presents a particular theme in color or style of design.
- 21) Produce a clear and coherent verbal defense of the presentation board as well as a written narrative that explains the principles of design, justifies the choice of samples, and includes a complete cost analysis of the project. Capture the presentation on video or other media along with photographs to include in the design portfolio with the written paper.

Interior Design Portfolio

- 22) Update materials, photographs, and sketches from course work to add to the portfolio begun in the foundations course. Include descriptions of the creative thought process behind each project included.

Standards Alignment Notes

*References to other standards include:

- TN [Scientific Research Standards](#) 1, 2, 3, 4, and 5 may provide additional insight and activities for educators.
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
 - o Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.