CSTN - Construction Trades

CSTN 100  Fundamentals of Construction Technology: 3 Credits (2 Lec, 1 Lab)
CSTN 100 introduces students to means and methods of construction and the terminology and materials used in the construction industry. Students will learn how to properly use and maintain hand tools, power tools and personal protective equipment (PPE). Students will also be introduced to OSHA standards and how they apply to sites safety.

CSTN 105  Introduction to Woodworking: 3 Credits (1 Lec, 2 Lab)
CSTN 105 introduces students to wood building materials and techniques. Students will learn about necessary equipment and safety protocols for the trade and will demonstrate foundational woodworking skills through the construction of building elements such as walls, windows and door frames.

CSTN 120  Carpentry Basics and Rough-In Framing: 4 Credits (1 Lec, 3 Lab)
COREQUISITE: CSTN 100. CSTN 120 introduces students to step-by-step building processes. Students will be exposed to rough framing principles through a combination of lecture and lab. This course will also outline the job descriptions and typical responsibilities associated with a carpenter.

CSTN 122  Beginning Carpentry Lab: 4 Credits (4 Lab)
COREQUISITE: CSTN 105, CSTN 122 is a hands-on lab that builds upon content learned in CSTN 105 and CSTN 120. It enhances the skills needed to successfully perform the technical tasks of a carpenter, including framing skills to construct a basic platform framed structure.

CSTN 148  Blueprints, Codes, and Estimating: 3 Credits (3 Lec)
(F) This course will introduce blueprints and emphasize reading, scaling, analyzing and bidding from plans. Topics covered will include: line weights, styles and types; title block information, dimensions, structural shapes, auxiliary views, section views, detail prints, symbols, scaling, acronyms found in different industries, and other various blueprint information. Students will also be taught how to use plans to bid and price materials, visit the Fall Parade of Homes, and compare what’s on the page to what really gets built. Typically Taken – 1st Semester (Fall).

CSTN 160  Construction Concepts and Building Lab: 3 Credits (1 Lec, 2 Lab)
PREREQUISITE: CSTN 122. (Sp) In this lab students will be asked to perform multiple tasks demanded of a Carpenter on a jobsite throughout the progression of a building project. Work projects, tasks, and proficiencies will tie heavily into the construction, remodel, or special construction projects in the community.

CSTN 171  Site Prep, Foundations and Concrete Installation: 3 Credits (1 Lec, 2 Lab)
PREREQUISITE: CSTN 105 and CSTN 120. (Sp) CSTN 171 introduces students to building site preparation techniques including equipment and safety protocols, foundation preparation, and slab construction. Students will learn proper hands-on techniques for layout, placement, reinforcement, and curing of concrete.

CSTN 173  Arch Construct and Material: 3 Credits (3 Lec)
(Sp) Upon successful completion of this course, the student will be able to identify the origins of materials and the extraction, properties, processing, and assemblies of the basic materials of construction. Thorough working knowledge of materials can enhance a construction project and enlighten the client, designer, drafts-person or end user. A complete understanding of materials, methods, techniques, sequences, and procedures can unify a design and create timeless, contemporary elements.

CSTN 191  Special Topics: 1-4 Credits ()
Repeatable up to 7 credits.

CSTN 220  Interior Finish Lab: 4 Credits (1 Lec, 3 Lab)
PREREQUISITE: CSTN 122. (Sp) This course has been developed to provide students with a general yet technical understanding of interior finish applications and methods. It will also provide students with instruction on how to safely and confidently use and maintain portable and stationary power tools associated with the fabrication of finish materials.

CSTN 248  Plans Examining II - IBC - Commercial Codes, Blueprint Reading, and Estimating: 3 Credits (3 Lec)
PREREQUISITE: CSTN 148, or consent of instructor, or approval of program director. (F) This course will introduce blueprints and emphasize blueprint reading, scaling, analyzing, and estimating plan components for commercial and multiple-residence projects. Topics covered will include: building use and occupancy, special occupancy requirements, height and area limitations based on construction type, fire resistance and protection requirements, requirements for evacuation, accessibility for persons with disabilities, building systems (lighting, HVAC, plumbing, electrical and elevators), and structural components. Commercial building code criteria in the design process will be emphasized. Students will also be taught how to use plans to bid and price materials.

CSTN 275  Construction Trades Ethics: 2 Credits (2 Lec)
(Sp) Construction Trades Ethics will discuss the basic ethical agreements and concepts on jobsites and within construction projects and contracts. Students will review case study scenarios to better understand potential industry situations and how to address them in an ethical manner.

CSTN 291  Special Topics: 1-4 Credits ()