CSTN - Construction Trades

CSTN 100 Fundamentals of Construction Technology: 3 Credits (2 Lec, 1 Lab)
CSTN100 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 jobsite safety.

CSTN 101 Introduction to Concrete: 1 Credits (1 Lab)
PREREQUISITE: CSTN 105 and CSTN 120
COREQUISITE: CSTN 171. (Sp) Carpentry CAS students only.
CSTN 101 introduces students to the concept of form building and the processes involved with concrete production. Students will be exposed to how to build, brace, and strip concrete forms or walls, columns and slabs
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CSTN 105 Introduction to Woodworking: 3 Credits (1 Lec, 2 Lab)
CSTN105 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)
(F) CSTN120 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)
(F) CSTN122 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) CSTN171 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 ()