

# CONSTRUCTION (CNST)

## **CNST 120, INTRODUCTION TO (HVAC) HEATING, VENTILATION AND AIR CONDITIONING 2 (5)**

This introductory course focuses on basic skills and concepts needed to plan and install heating and cooling systems in residential structures. Sheet metal forming of ductwork and their installation will also be introduced. (A special fee will be assessed.)

**General Education:** GEO2, GEO5

**Typically Offered:** Fall and Spring Semesters

## **CNST 121, CONSTRUCTION DOCUMENT READING 3 (3)**

This course introduces the student to the skills, concepts, instruments and tools which will be needed in order to use and understand construction drawings. The material learned will allow the student to read plans and then apply the information when planning and estimating the cost for residential structures. (CTAG)

**General Education:** GEO1, GEO6, GEO7

**Typically Offered:** Summer, Fall and Spring Semesters

## **CNST 122, INTRODUCTION TO CARPENTRY 4 (9)**

This course is an introduction to basic carpentry procedures covering the selection, use and care of power and hand tools. The student will gain practical experience and skills in layout, cutting and assembly of rafters and stairs. The student will also make floor systems, wall assemblies and practice cutting and fitting moldings, trim, doors and windows. (A special fee will be assessed.)

**General Education:** GEO1, GEO2, GEO5, GEO6

**Typically Offered:** Fall and Spring Semesters

## **CNST 123, INTRODUCTION TO ELECTRICAL WIRING 2 (5)**

This course introduces the student to skills, concepts, instruments, tools and the National Electrical Codes used when wiring so that it meets the requirements of electrical inspectors and power companies. The student will learn about wiring materials, devices, splices, outlets, switch boxes, service installation, and rough in and finish work. Laboratory required. (A special fee will be assessed.)

**General Education:** GEO1, GEO5, GEO6, GEO7

**Typically Offered:** Fall and Spring Semesters

## **CNST 124, INTRODUCTION TO PLUMBING 2 (5)**

This course introduces the student to skills, concepts, instruments, tools and materials used in plumbing. The student will cover the following plumbing topics: codes, take-offs, soldering and PVC & ABS and will then get hands-on training installing showers, tubs, toilets, sinks and hot water tanks. Laboratory required. (A special fee will be assessed.)

**General Education:** GEO1, GEO5, GEO6, GEO7

**Course Entry Requirement(s):** None

**Typically Offered:** Fall and Spring Semesters

## **CNST 125, INTRODUCTION TO FINISH CARPENTRY 2 (5)**

This course introduces the students to skills, concepts, instruments and tools used to finish carpentry. The student will learn about and get hands-on training installing drywall, wall and floor coverings, trim and molding, cabinets and bathroom and kitchen fixtures. Laboratory required. (A special fee will be assessed.)

**General Education:** GEO1, GEO5, GEO6, GEO7

**Typically Offered:** Spring Semester

## **CNST 126, INTRODUCTION TO MASONRY 2 (5)**

This course introduces the student to skills, concepts, instruments, tools and bonding materials used in masonry. The student will learn about and get hands-on training in the areas of flatwork, cutting, chipping, and laying in position blocks and bricks. Laboratory required. (A special fee will be assessed.)

**General Education:** GEO1, GEO2, GEO5, GEO6

**Typically Offered:** Spring Semester

## **CNST 127, GREEN BUILDING & LEED RATING SYSTEMS 4 (4)**

This course offers a comprehensive exposure to understanding sustainable designed projects in today's residential and commercial buildings. It provides the basic knowledge to define and measure "green buildings" according to the LEED Green Building Rating System. This course will help students prepare for the LEED (Leadership in Energy and Environmental Design) Professional Accreditation Exams.

**General Education:** GEO1, GEO2, GEO4, GEO8

**Typically Offered:** Not offered this year

## **CNST 201, SURVEYING 3 (5)**

An introductory course for Construction majors into the care and use of field instruments used in land surveying. Students will take field measurements and learn to make the basic computations and adjustments necessary to post process field survey measurements. Laboratory required. (A special fee will be assessed.) (TAG)

**General Education:** GEO1, GEO2, GEO5, GEO6, GEO7

**Course Entry Requirement(s):** Prerequisite: CNST 121 and MTHM 155

**Typically Offered:** Summer Semester

## **CNST 202, CONSTRUCTION METHODS AND MATERIALS 3 (4)**

This course is a study of common materials and building practices used in construction. Conventional material properties, performance requirements, and principles of material selection common to the construction industry will be covered.

**General Education:** GEO2, GEO6, GEO8

**Course Entry Requirement(s):** Prerequisite: CNST 121 and MTHM 155

**Typically Offered:** Offer as required

## **CNST 205, CONSTRUCTION ESTIMATING 3 (5)**

This course is designed for construction majors and will provide the foundation for understanding the costs associated with construction projects. Class and lab exercises will include the use of spreadsheet software and utilize the fundamentals of the quantity takeoff process in order to complete accurate estimates for all types of construction projects. Laboratory required. (A special fee will be assessed.)

**General Education:** GEO1, GEO3, GEO6, GEO7

**Course Entry Requirement(s):** Prerequisite: TECN 111 and CNST 121

**Typically Offered:** Fall Semester

## **CNST 206, CONSTRUCTION ESTIMATING II 3 (5)**

This course is designed for construction majors and examines putting costs to the project, finalizing the bid, incorporating the estimate into the schedule, buying out the project, bidding ethics and using computer spreadsheets including Excel to automate estimating functions. Laboratory required. (A special fee will be assessed.)

**General Education:** GEO1, GEO4, GEO7

**Course Entry Requirement(s):** Prerequisite: CNST 205

**Typically Offered:** Spring Semester

**CNST 210, SAFETY IN CONSTRUCTION 2 (3)**

The course is designed to provide training to construction workers with safety responsibilities. The course will be instructed by an OSHA recognized instructor and will emphasize hazard identification, avoidance, control and prevention. Successful participants will be awarded an OSHA 30 card for construction safety. Laboratory required. (A special fee will be assessed.)(CTAG)

**General Education:** GE01, GE05, GE06

**Typically Offered:** Fall Semester

**CNST 287, WORK-BASED LEARNING I - CNST 1-3 (1)**

This course provides supervised work experience building on experience in Work-Based Learning with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating classroom learning with work experience. Students will be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. Activities are coordinated and evaluated by college personnel.

**General Education:** GE01, GE02, GE06, GE08

**Course Entry Requirement(s):** Prerequisite: Minimum 2.0 GPA overall and division approval

**Typically Offered:** Offer as required

**CNST 288, WORK-BASED LEARNING II - CNST 1-3 (1)**

Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** GE01, GE02, GE06, GE08

**Course Entry Requirement(s):** Prerequisite: CNST 287

**Typically Offered:** Offer as required

**CNST 289, WORK-BASED LEARNING III - CNST 1-3 (1)**

Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** GE01, GE02, GE06, GE08

**Course Entry Requirement(s):** Prerequisite: CNST 288

**Typically Offered:** Offer as required

**CNST 299, INDIVIDUALIZED STUDIES IN CONSTRUCTION 1-3 (1)**

An in-depth study of areas in construction presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to six (6) times for a total of six (6) credit hours.

**Course Entry Requirement(s):** Prerequisite: Second-year standing and division approval

**Typically Offered:** Offer as required