

CNBT 1372: Construction Building Technology – Capstone

Course Description

This is a capstone course that provides students the opportunity to apply the knowledge and skills they have gained throughout the program. In this course students will complete a project that is a culmination of the major program outcomes for their award.

Course Prerequisites

CNBT 1411 Construction Methods and Materials

CNBT 1402 Mechanical, Plumbing and Electrical Systems in Construction

CRPT 1415 Conventional Wall Systems

CNBT 1359 Project Scheduling

CNBT 1446 Construction Estimating

CNBT 2342 Construction Management 1

CNBT 2346 Construction Management II

OSHT 1305 OSHA Regulations

Course Rationale

CNBT 1372 is the capstone class required for completion of the Construction Management Certificate and Degree. This course has been designed for students in the last semester of their AAS in Construction Management or their Construction Manager Certificate.

Student Learning Outcomes

Course-Level Student Learning Outcomes

Upon completion of this course, the student should be able to:

- Understand the fundamentals of reading and interpreting blueprints and specifications. This includes elevations, plan views, sections, schedules and symbols.
- Decode prints symbols.
- Distinguish print components – framing plans, roofing plans.
- Utilize construction math as it pertains to prints
- Understand the anatomy of residential and commercial structures.
- Utilize problem solving strategies to print reading.
- Understand how various building codes apply to residential structures.
- Acquire knowledge of building materials.
- Apply this knowledge as it pertains to project management.

Program-Level Student Learning Outcomes

Upon completion of the AAS in Construction Management and the Construction Manager certificate, students will be able to:

- Identify and understand the safety concepts, regulations and work practices set forth by OSHA (Occupational Safety and Health Administration) in the 29 CFR 1926 construction industry standards.
- Create a project schedule, demonstrating proper sequencing of construction methods.
- Create a material take off and produce an estimate utilizing construction documents, including working prints.
- Demonstrate competency in Construction Management skills (Residential and Commercial level – projects).
- Demonstrate strong communication skills including fluency in construction terminology and building codes.
- Demonstrate knowledge of building products and installation procedures including concrete, wall systems, exterior finish and plumbing, electrical and mechanical systems.

Required Texts

Please refer to instructor's syllabus for required texts.

Instructional Methodology

Each student will receive individual instruction.

Grading System

Grades are to be determined based upon your individual instructor's grading rubric.

Course Policies

Attendance/Class Participation

Regular and punctual class and laboratory attendance is expected of all students. If attendance or compliance with other course policies is unsatisfactory, the instructor may withdraw students from the class.

Withdrawal Policy

It is the responsibility of each student to ensure that his or her name is removed from the roll should he or she decide to withdraw from the class. The instructor does, however, reserve the right to drop a student should he or she feel it is necessary. If a student decides to withdraw, he or she should also verify that the withdrawal is submitted before the Final Withdrawal Date. The student is also strongly encouraged to retain their copy of the withdrawal form for their records.

Students who enroll for the third or subsequent time in a course taken since Fall, 2002, may be charged a higher tuition rate, for that course.

State law permits students to withdraw from no more than six courses during their entire undergraduate career at Texas public colleges or universities. With certain exceptions, all course withdrawals automatically count towards this limit. Details regarding this policy can be found in the ACC college catalog.

Incompletes

An instructor may award a grade of “I” (Incomplete) if a student was unable to complete all of the objectives for the passing grade in a course. An incomplete grade cannot be carried beyond the established date in the following semester. The completion date is determined by the instructor but may not be later than the final deadline for withdrawal in the subsequent semester.

Statement on Scholastic Dishonesty

A student attending ACC assumes responsibility for conduct compatible with the mission of the college as an educational institution. Students have the responsibility to submit coursework that is the result of their own thought, research, or self-expression. Students must follow all instructions given by faculty or designated college representatives when taking examinations, placement assessments, tests, quizzes, and evaluations. Actions constituting scholastic dishonesty include, but are not limited to, plagiarism, cheating, fabrication, collusion, and falsifying documents. Penalties for scholastic dishonesty will depend upon the nature of the violation and may range from lowering a grade on one assignment to an “F” in the course and/or expulsion from the college. See the Student Standards of Conduct and Disciplinary Process and other policies at <http://www.austincc.edu/current/needtoknow>

Student Rights and Responsibilities

Students at the college have the rights accorded by the U.S. Constitution to freedom of speech, peaceful assembly, petition and association. These rights carry with them the responsibility to accord the same right to others in the college community and not to interfere with or disrupt the educational process. Opportunity for students to examine and question pertinent data and assumptions of a given discipline, guided by the evidence of scholarly research, is appropriate in a learning environment. This concept is accompanied by an equally demanding concept of responsibility on the part of the student. As willing partners in learning, students must comply with college rules and procedures.

Statement on Students with Disabilities

Each ACC campus offers support services for students with documented disabilities. Students with disabilities who need classroom, academic or other accommodations must request

them through the Office for Students with Disabilities (OSD). Students are encouraged to request accommodations when they register for courses or at least three weeks before the start of the semester, otherwise the provision of accommodations may be delayed.

Students who have received approval for accommodations from OSD for this course must provide the instructor with the 'Notice of Approved Accommodations' from OSD before accommodations will be provided. Arrangements for academic accommodations can only be made after the instructor receives the 'Notice of Approved Accommodations' from the student.

Students with approved accommodations are encouraged to submit the 'Notice of Approved Accommodations' to the instructor at the beginning of the semester because a reasonable amount of time may be needed to prepare and arrange for the accommodations.

Additional information about the Office for Students with Disabilities is available at <http://www.austincc.edu/support/osd/>

Safety Statement

Austin Community College is committed to providing a safe and healthy environment for study and work. You are expected to learn and comply with ACC environmental, health and safety procedures and agree to follow ACC safety policies. Additional information on these can be found at <http://www.austincc.edu/ehs>. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the Emergency Procedures poster and Campus Safety Plan map in each classroom. Additional information about emergency procedures and how to sign up for ACC Emergency Alerts to be notified in the event of a serious emergency can be found at <http://www.austincc.edu/emergency/>.

Please note, you are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities.

Use of ACC email

All College e-mail communication to students will be sent solely to the student's ACCmail account, with the expectation that such communications will be read in a timely fashion. ACC will send important information and will notify you of any college related emergencies using this account. Students should only expect to receive email communication from their instructor using this account. Likewise, students should use their ACCmail account when communicating with instructors and staff. Instructions for activating an ACCmail account can be found at <http://www.austincc.edu/accmail/index.php>.

Testing Center Policy

Under certain circumstances, an instructor may have students take an examination in a testing center. Students using the Academic Testing Center must govern themselves according to the Student Guide for Use of ACC Testing Centers and should read the entire guide before going to take the exam. To request an exam, one must have:

- **ACC Photo ID**
- Course Abbreviation (e.g., ENGL)
- Course Number (e.g., 1301)
- Course Synonym (e.g., 10123)
- Course Section (e.g., 005)
- Instructor's Name

Do NOT bring cell phones to the Testing Center. Having your cell phone in the testing room, **regardless of whether it is on or off**, will revoke your testing privileges for the remainder of the semester. ACC Testing Center policies can be found at <http://www.austincc.edu/testctr/>

Student and Instructional Services

ACC strives to provide exemplary support to its students and offers a broad variety of opportunities and services. Information on these services and support systems is available at: <http://www.austincc.edu/s4/>

Links to many student services and other information can be found at: <http://www.austincc.edu/current/>

ACC Learning Labs provide free tutoring services to all ACC students currently enrolled in the course to be tutored. The tutor schedule for each Learning Lab may be found at: <http://www.austincc.edu/tutor/students/tutoring.php>

For help setting up your ACCeID, ACC Gmail, or ACC Blackboard, see a Learning Lab Technician at any ACC Learning Lab.

Scans Competencies

The U.S. Department of Labor appointed a Secretary's Commission on Achieving Necessary Skills to determine the general academic and workforce skills needed to succeed in the workplace. The commission's purpose has been to encourage a vital national economy based on a highly skilled workforce. The Building Construction Technology Department at Austin Community College incorporates these SCANS competencies into its course offerings by means of classroom instruction, lab exercises, student interaction, and specific work-related assignments. A listing of the SCANS competencies for each BCT course is as follows:

	Scans Competencies	Resources	Interpersonal	Information	Systems	Technology	Basic Skills	Thinking Skills	Personal Qualities
CNBT 1342		✓	✓	✓	✓	✓	✓	✓	✓
CNBT 1359		✓	✓	✓	✓	✓	✓	✓	✓
CNBT 1400		✓	✓	✓	✓	■	✓	✓	✓
CNBT 1402		✓	✓	✓	✓	✓	✓	✓	✓
CNBT 1411		✓	✓	✓		✓	✓	✓	✓
CNBT 1413		✓	✓	✓	✓	✓	✓	✓	
CNBT 1446		✓		✓	✓	✓	✓	✓	
CNBT 2305		✓	✓	✓	✓	✓	✓	✓	✓
CNBT 2342		✓	✓	✓			✓	✓	
CNBT 2344		✓	✓	✓	✓	✓	✓	✓	
CNBT 2346		✓	✓	✓	✓		✓	✓	✓
CNBT 2417		✓		✓	✓	✓	✓	✓	✓
CNBT 2435		✓		✓	✓	✓	✓	✓	
CNBT 2437		✓		✓	✓	✓	✓	✓	
CRPT 1411		✓	✓	✓	✓	✓	✓	✓	
CRPT 1415		✓	✓	✓	✓	✓	✓	✓	✓
CRPT 1441		✓	✓	✓	✓	✓	✓	✓	✓
CRPT 1445		✓	✓	✓	✓	✓	✓	✓	✓
FRNL 1301		✓	✓	✓	✓	✓	✓	✓	✓
OSHT 1305		✓		✓	✓	✓	✓	✓	

RBPT 2430		✓		✓	✓	✓	✓	✓	✓
WDWK 1391		✓	✓	✓	✓	✓	✓	✓	✓
WDWK 1400		✓	✓	✓	✓	✓	✓	✓	
WDWK 1413		✓	✓	✓	✓	✓	✓	✓	
WDWK 2371		✓	✓	✓	✓	✓	✓	✓	
WDWK 2405			✓	✓	✓	✓		✓	
WDWK 2451		✓	✓	✓	✓	✓	✓	✓	
WDWK 2459		✓	✓	✓	✓	✓	✓	✓	
CNBT 1391		✓			✓	✓		✓	✓
CNBT 1372		✓	✓	✓	✓	✓	✓	✓	✓
CNBT 1391/1491, CRPT 1291/1491, WDWK 1191/1491		✓	✓	✓	✓	✓	✓	✓	✓