

Washtenaw Community College Comprehensive Report

CON 235 Construction - Building Codes and Prints Effective Term: Fall 2025

Course Cover

College: Advanced Technologies and Public Service Careers

Division: Advanced Technologies and Public Service Careers

Department: Heating, Ventilation and A/C

Discipline: Residential Construction Technology

Course Number: 235

Org Number: 14750

Full Course Title: Construction - Building Codes and Prints

Transcript Title: Const. Bldg Codes & Prints

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: Reactivation

Change Information:

Course description

Outcomes/Assessment

Objectives/Evaluation

Other:

Rationale: With the resurgence of the construction industry, a new Construction Technology AAS degree is being proposed and will include this course. Job outlook is very strong compared to what it was when the course was discontinued.

Proposed Start Semester: Fall 2025

Course Description: In this course, students will explore the fundamentals of residential building codes, blueprint reading, and construction plan development. Students will learn to interpret construction symbols, analyze blueprints, and apply regulatory standards to light frame construction projects, in accordance with Michigan Residential Building Codes. Through hands-on exercises and practical case studies, students will gain the skills necessary to navigate permit requirements, ensure code compliance, and develop detailed residential construction plans. This course is part of the 60 contact hours required for the State of Michigan builder's license.

Course Credit Hours

Variable hours: No

Credits: 3

Lecture Hours: Instructor: 45 **Student:** 45

Lab: Instructor: 0 **Student:** 0

Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 45 **Student:** 45

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

No Level Required

Requisites

Prerequisite

Math Level 3

or

Prerequisite

MTH 157 or higher, minimum grade "C"

General Education

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Interpret and apply State of Michigan Residential Building Code.

Assessment 1

Assessment Tool: Outcome-related exam questions

Assessment Date: Winter 2026

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 80% of students will score 80% or higher.

Who will score and analyze the data: Departmental faculty

Assessment 2

Assessment Tool: Outcome-related portfolio project

Assessment Date: Winter 2026

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 80% of students will score 80% or higher.

Who will score and analyze the data: Departmental faculty

2. Interpret and apply construction symbols and abbreviations for homes and light framed construction.

Assessment 1

Assessment Tool: Outcome-related exam questions

Assessment Date: Winter 2026

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 80% of students will score 80% or higher.

Who will score and analyze the data: Departmental faculty

3. Sketch the floor plans, elevations, and sections needed to construct residential structures.

Assessment 1

Assessment Tool: Outcome-related exam questions

Assessment Date: Winter 2026

Assessment Cycle: Every Three Years

Course section(s)/other population: All
 Number students to be assessed: All
 How the assessment will be scored: Answer key
 Standard of success to be used for this assessment: 80% of students will score 80% or higher.
 Who will score and analyze the data: Departmental faculty

Assessment 2

Assessment Tool: Outcome-related portfolio project
 Assessment Date: Winter 2026
 Assessment Cycle: Every Three Years
 Course section(s)/other population: All
 Number students to be assessed: All
 How the assessment will be scored: Departmentally-developed rubric
 Standard of success to be used for this assessment: 80% of students will score 80% or higher.
 Who will score and analyze the data: Departmental faculty

Course Objectives

1. Recognize the various building code identifiers used in residential construction designs.
2. Describe how building codes apply to different construction scenarios.
3. Identify the proper materials required to build a home.
4. Determine the standards required in light frame construction through the use of a code book.
5. Explain the various construction symbols and abbreviations found on prints.
6. Identify the material type and sizes from a provided set of prints.
7. Produce the correct symbols to represent objects and materials in the design of a residential structure.
8. Determine which Michigan Residential Codes are followed when producing a sketch or drawing for a given set of construction scenarios.
9. Identify the different elements of a properly produced floor plan.

New Resources for Course

Course Textbooks/Resources

Textbooks
 Manuals
 Periodicals
 Software

Equipment/Facilities

Level III classroom

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Matthew Hagood</i>	<i>Faculty Preparer</i>	<i>Feb 10, 2025</i>
Department Chair/Area Director: <i>Brian Martindale</i>	<i>Recommend Approval</i>	<i>Feb 10, 2025</i>
Dean: <i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>Feb 10, 2025</i>
Curriculum Committee Chair: <i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>Mar 05, 2025</i>
Assessment Committee Chair: <i>Jessica Hale</i>	<i>Recommend Approval</i>	<i>Mar 12, 2025</i>
Vice President for Instruction: <i>Brandon Tucker</i>	<i>Approve</i>	<i>Mar 13, 2025</i>

Washtenaw Community College Comprehensive Report

CON 235 Construction - Building Codes and Prints

Effective Term: Fall 2012

Course Cover

Division: Vocational Technologies

Department: Construction Institute

Discipline: Residential Construction Technology

Course Number: 235

Org Number: 14725

Full Course Title: Construction - Building Codes and Prints

Transcript Title: Const. Bldg Codes & Prints

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: New Course

Change Information:

Rationale: Advisory board recommendations. Replacing CON 106 in the associates degree.

Proposed Start Semester: Fall 2012

Course Description: This course covers light frame construction building codes, print reading and reproduction. Students will discuss the State of Michigan Residential Building codes, plan development, and design. This course is part of the sixty contact hours required for the State of Michigan builders license.

Course Credit Hours

Variable hours: No

Credits: 3

Lecture Hours: Instructor: 45 **Student:** 45

Lab: Instructor: 0 **Student:** 0

Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 45 **Student:** 45

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Level 3

Requisites

General Education

Request Course Transfer

Proposed For:

Central Michigan University

Eastern Michigan University

Ferris State University

Student Learning Outcomes

1. Interpret State of Michigan Residential Building Code.

Assessment 1

Assessment Tool: Exam

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer Key

Standard of success to be used for this assessment: 80% of students will receive 80% or higher

Who will score and analyze the data: Department Faculty

Assessment 2

Assessment Tool: Portfolio

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 80% of students will score 80% or higher

Who will score and analyze the data: Department Faculty

2. Interpret construction symbols and abbreviations for homes and light framed construction.

Assessment 1

Assessment Tool: Exam

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer Key

Standard of success to be used for this assessment: 80% of the students will score 80% or higher

Who will score and analyze the data: Department faculty

3. Sketch floor plans, elevations, and sections needed to construct residential structures.

Assessment 1

Assessment Tool: Exam

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer Key

Standard of success to be used for this assessment: 80% of students will receive 80% or higher

Who will score and analyze the data: Department Faculty

Assessment 2

Assessment Tool: Portfolio

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: departmentally-developed rubric

Standard of success to be used for this assessment: 80% of the students will score 80% or higher

Who will score and analyze the data: Department Faculty

Course Objectives

1. Recognize various code identifiers and where they will be used in the construction of a home.

Matched Outcomes

1. Interpret State of Michigan Residential Building Code.
2. Identify proper materials and sizes required to build a home.

Matched Outcomes

1. Interpret State of Michigan Residential Building Code.
3. Use code book to determine standards required in light frame construction.

Matched Outcomes

1. Interpret State of Michigan Residential Building Code.
4. Recognize various construction symbols and abbreviations found on prints.

Matched Outcomes

2. Interpret construction symbols and abbreviations for homes and light framed construction.
5. Identify material type and sizes from prints.

Matched Outcomes

2. Interpret construction symbols and abbreviations for homes and light framed construction.
6. Use proper lines and symbols to represent objects and materials for a residential structure.

Matched Outcomes

3. Sketch floor plans, elevations, and sections needed to construct residential structures.
7. Use site specific information to determine which Michigan Residential Codes are followed when producing a sketch or drawing.

Matched Outcomes

1. Interpret State of Michigan Residential Building Code.
3. Sketch floor plans, elevations, and sections needed to construct residential structures.

New Resources for Course

Course Textbooks/Resources

Textbooks

International Code Council. *Michigan Residential Code Book*, 2009 ed. International Code Council, Inc, 2010, ISBN: 978-1-58001-9.

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Cristy Lindemann</i>	<i>Faculty Preparer</i>	<i>Feb 17, 2012</i>
Department Chair/Area Director: <i>Cristy Lindemann</i>	<i>Recommend Approval</i>	<i>Feb 17, 2012</i>
Dean: <i>Ross Gordon</i>	<i>Recommend Approval</i>	<i>Feb 17, 2012</i>
Vice President for Instruction: <i>Stuart Blacklaw</i>	<i>Approve</i>	<i>Apr 05, 2012</i>