Course Outcome Summary
Required Program Core Course

CONM 103 – AutoCAD and Residence Drafting

Course Information
Division: ASET
Contact Hours: 90
Theory: 30
Lab Hours: 60
Total Credits: 4

Prerequisites: CONM 110. MDTC 160 highly recommended

Course Description: Complete working drawings are developed for one building of frame construction, with emphasis on the interrelationships of the various views, including site and floor plans, exterior and interior elevations, sections and details utilizing AutoCAD. AutoCAD standards are implemented to complete a final project of a full set of construction drawings for a complete building, as well as 3-D rendering and data take-off with the use of BIM (Building Information Modeling).

This course is a required core course for students pursuing a(n) AAS in Construction Management Technology.

Program Outcomes Addressed by this Course:
Upon successful completion of this course, students should be able to meet the program outcomes listed below:

A. Analyze, interpret and understand the fundamental processes used to create project designs and construction documents.
C. Use clear and effective written and oral communication methods to facilitate interaction with all project team participants.
D. Employ the methods, materials, used in the design and construction of buildings and civil works.
H. Interpret and apply applicable building codes and regulations in construction processes.
I. Operate industry-standard software for computer-aided design and drafting (CADD), project cost estimating, and project scheduling.

Course Outcomes
In order to evidence success in this course, the students will be able to:

1. Demonstrate knowledge of architectural drafting standards and procedures.

   In addition following program outcomes are met by above outcome.
B. Analyze, interpret and understand the fundamental processes used to create project designs and construction documents.
E. Use clear and effective written and oral communication methods to facilitate interaction with all project team participants.
F. Employ the methods, materials, used in the design and construction of buildings and civil works.
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J. Interpret and apply applicable building codes and regulations in construction processes.
K. Operate industry-standard software for computer-aided design and drafting (CADD), project cost estimating, and project scheduling.
L. Demonstrate and design utilizing different types of orthographic views: plan, elevation, section.

In addition following program outcomes are met by above outcome.

A. Analyze, interpret and understand the fundamental processes used to create project designs and construction documents.
C. Use clear and effective written and oral communication methods to facilitate interaction with all project team participants.
D. Employ the methods, materials, used in the design and construction of buildings and civil works.
H. Interpret and apply applicable building codes and regulations in construction processes.
I. Operate industry-standard software for computer-aided design and drafting (CADD), project cost estimating, and project scheduling.

3. Demonstrate and design utilizing the layers within AutoCAD

In addition following program outcomes are met by above outcome.

A. Analyze, interpret and understand the fundamental processes used to create project designs and construction documents.
C. Use clear and effective written and oral communication methods to facilitate interaction with all project team participants.
D. Employ the methods, materials, used in the design and construction of buildings and civil works.
H. Interpret and apply applicable building codes and regulations in construction processes.
I. Operate industry-standard software for computer-aided design and drafting (CADD), project cost estimating, and project scheduling.

4. Identify, draft, design and print, plan, section, details and elevation views for buildings of light frame construction.

In addition following program outcomes are met by above outcome.
A. Analyze, interpret and understand the fundamental processes used to create project designs and construction documents.

C. Use clear and effective written and oral communication methods to facilitate interaction with all project team participants.

D. Employ the methods, materials, used in the design and construction of buildings and civil works.

H. Interpret and apply applicable building codes and regulations in construction processes.

I. Operate industry-standard software for computer-aided design and drafting (CADD), project cost estimating, and project scheduling.

5. Draft, dimension and print a fully functional set of complete construction drawings for a single story, wood frame structure utilizing AutoCad and BIM. In addition following program outcomes are met by above outcome.

A. Analyze, interpret and understand the fundamental processes used to create project designs and construction documents.

C. Use clear and effective written and oral communication methods to facilitate interaction with all project team participants.

D. Employ the methods, materials, used in the design and construction of buildings and civil works.

H. Interpret and apply applicable building codes and regulations in construction processes.

I. Operate industry-standard software for computer-aided design and drafting (CADD), project cost estimating, and project scheduling.

Date Updated: 9-18-18
By: Lisa Schaller