Course Outcome Summary
Required Program Core Course

CONM 110 – Construction Blueprint Reading

Course Information
Division
Contact Hours
Theory
Lab Hours
Total Credits
ASET
60
30
30
3

Prerequisites: RDG 090 and MATH 090 or qualifying scores on accepted placement tests

Course Description: This course is designed to give students the skills required to interpret and understand blueprints and specifications. The course covers blueprints including but not limited to Residential, Commercial, Light Industrial along with Site Work, Electrical, Plumbing and HVAC. Students will obtain a strong understanding of how a building is constructed by reviewing multiple disciplines of blueprints and the importance of project specifications.

This course is a required core course for students pursuing an 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.
B. Define the roles, relationships and responsibilities of the participants in the design and construction process.
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.
E. Accurately quantify materials required for project construction.
F. Interpret construction documents to accurately predict project costs and assign resources.
G. Utilize construction operations planning methods to create accurate project schedules and monitor productivity.
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.
J. Utilize a working knowledge of safety, health, and environmental issues related to construction activities.
K. Utilize modern surveying methods for land measurement and construction layout.
Course Outcomes
In order to evidence success in this course, the students will be able to:

1. **Demonstrate knowledge of residential blueprints and terminology.**
   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.
   B. Define the roles, relationships and responsibilities of the participants in the design and construction process.
   C. Accurately quantify materials required for project construction.
   D. Interpret construction documents to accurately predict project costs and assign resources.
   E. Utilize construction operations planning methods to create accurate project schedules and monitor productivity.

2. **Demonstrate knowledge of commercial & industrial blueprints and terminology.**
   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.
   D. Employ the methods, materials, used in the design and construction of buildings and civil works.
   E. Accurately quantify materials required for project construction.
   F. Interpret construction documents to accurately predict project costs and assign resources.
   G. Utilize construction operations planning methods to create accurate project schedules and monitor productivity.

3. **Demonstrate knowledge of basic sketching techniques along with basic construction math & understand how to two topics relate.**
   In addition, following program outcomes are met by above outcome.
   
   C. Use clear and effective written and oral communication methods to facilitate interaction with all project team participants.
   E. Accurately quantify materials required for project construction.
   F. Interpret construction documents to accurately predict project costs and assign resources.
   I. Operate industry-standard software for computer-aided design and drafting (CADD), project cost estimating, and project scheduling.
   K. Utilize modern surveying methods for land measurement and construction layout.
4. **Demonstrate knowledge to be able to navigate a set of blueprints & be able to extract information used to construct the building.**
   In addition, following program outcomes are met by above outcome.

   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.
   E. Accurately quantify materials required for project construction.
   F. Interpret construction documents to accurately predict project costs and assign resources.
   I. Operate industry-standard software for computer-aided design and drafting (CADD), project cost estimating, and project scheduling.
   J. Utilize a working knowledge of safety, health, and environmental issues related to construction activities.