Course Outcome Summary

Required Program Core Course

CONM 240 – Construction Planning and Scheduling w/ Primavera

Course Information

Division: ASET
Contact Hours: 60
Theory: 30
Lab Hours: 30
Total Credits: 3

Prerequisites: CONM 100 – Introduction to Design and Construction and CONM 110 – Blueprint Reading or Instructor Consent

Course Description

A comprehensive course that introduces proper project planning, scope, and schedule development. Topics include activity durations and the methods of determining them, PERT, precedence, linear scheduling, resource allocation development of a work breakdown structure, resource loading, cost loading, and resource-leveling. The students will identify the required activities, resources, and costs required to monitor a project throughout the construction process. Students will be required to complete both manual and computerized scheduling assignments. Students will use “Primavera” scheduling software to complete assigned projects.

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

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

1 - Understand the basic concepts and principles of construction scheduling, including the critical path method (CPM) and the work breakdown structure (WBS).
   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.

2 - Be able to set up and use Primavera to create and manage construction schedules, including creating a WBS, network diagram, and Gantt chart.
   In addition, following program outcomes are met by above outcome.

   G. Utilize construction operations planning methods to create accurate project schedules and monitor productivity.

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

3 - Understand how to manage and allocate resources in a construction schedule, including how to analyze resource usage and level resources.
   In addition, following program outcomes are met by above outcome.

   G. Utilize construction operations planning methods to create accurate project schedules and monitor productivity.

4 - Understand how to monitor and track progress on a construction schedule, including how to enter and update actual progress and generate progress reports.
   In addition, following program outcomes are met by above outcome.

   G. Utilize construction operations planning methods to create accurate project schedules and monitor productivity.
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5 - Understand how to plan and manage costs and budgets in a construction schedule, including how to track costs and compare them to the budget. In addition, following program outcomes are met by above outcome.

F. Interpret construction documents to accurately predict project costs and assign resources.

6 - Be able to analyze a construction project, understand the scope, and create a detailed schedule of the project using Primavera. In addition, following program outcomes are met by above outcome.

G. Utilize construction operations planning methods to create accurate project schedules and monitor productivity.

7 - Be able to present the project schedule, including scope, budget, resources, and constraints, and explain how they will manage and track progress and cost within the schedule. 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.

8 - Be able to use Primavera to troubleshoot and resolve scheduling issues. In addition, following program outcomes are met by above outcome.

G. Utilize construction operations planning methods to create accurate project schedules and monitor productivity.

Date Updated: 10/09/23
By: Emrah Kazan, Ph.D.