

Bemidji State University

TADT 4260: Computerized Construction Estimating

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: *.*

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

An exploration and study of computerized construction estimating methods, software, and approaches for estimating, planning, and documenting construction projects. Prerequisite: TADT 3260 or consent of instructor.

B. COURSE EFFECTIVE DATES: 08/22/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Advanced estimating with Excel: converting existing forms, creating new forms, proposals and more
2. Finalizing the bid; submitting the bid, project buyout, the estimate as a basis for scheduling and ethics
3. Fundamentals of the quantity takeoff for specific divisions of the Construction Specification Index and their related material subdivisions
4. Overview of the estimating and bidding process, the art of estimating, using Excel
5. Putting costs to the estimate: material pricing, labor productivity, labor rates, equipment costs, crew rates, subcontract pricing, markups, pricing extensions and avoiding errors

D. LEARNING OUTCOMES (General)

1. learn to relate to and summarize building materials and processes to critically evaluate construction processes for estimating
2. learn to identify, interpret and select proper building materials, and procedures used in construction estimating.
3. explore and develop skills in using computer-estimating software.
4. Develop their own Excel estimating system specific to an area of construction that is of special interest to the student.
5. increase their knowledge about the estimating process in the construction industry,
6. apply formulas to an Excel Construction format as needed to gather proper quantities in performing material take-offs.
7. become familiar with CSI Master-Format divisions.
8. become familiar with concepts used in estimating software.
9. become familiar with construction materials and methods.
10. develop estimating and bidding skills.
11. develop skills in material takeoff.
12. develop skills in reading and interpret building plans, drawings and specifications.
13. develop the ability to create accurate estimating documentation.
14. set-up and become familiar with the basics of Excel Computerize Estimating as used in the construction industry to create estimates.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted