



ConE 321 Construction Estimating (Fall 2020)

: Study of the principles and application of construction estimating including quantity takeoff, pricing of materials, classification of work, labor, overhead, specifications, bid procedures, and project scheduling. Students will be introduced to computerized estimating and scheduling software. Prerequisites: CONE 221 and ENGR 207.

Instructor: Ilseok “Eddie” Oh, Ph.D.
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 Texas A&M University – Commerce
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Office Hour: “Virtual” office hours will be announced

Lecture/Lab: Web-based Class

Required Text: Construction Estimating Using Excel, 3rd Ed., Steven Peterson, 2018, Pearson
 (ISBN: 978-0134405506)

Building Construction Costs (RSMMeans 2018), ISBN: 978-1946872012, Author: Gordian

Learning Outcomes:

1. Learn plan reading and quantity takeoff.
2. Learn bid documents, estimating process, and conceptual estimating.
3. Learn how to estimate the construction costs.
4. Compute the Work Breakdown Structure of a construction project, dividing it into manageable building components.
5. Select the appropriate cost data associated with each building component from historical cost indexes.
6. Use software to estimate the cost of a construction project.
7. Write a technical report as a bid package and give a professional presentation as a team

Course Policies:

- Course Requirements and Grades

Assignment & Quizzes	60%
Exam I	20%
Exam II	20%

- Grading

A	B	C	D	F
100 - 90	89 - 80	79 - 70	69 - 60	59 - 0

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

<http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette <http://www.albion.com/netiquette/corerules.html>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

Graduate Student Academic Dishonesty 13.99.99.R0.10

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: Rebecca.Tuerk@tamuc.edu

Website: Office of Student Disability Resources and Services

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus

document and/or consult your event organizer.

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

“A&M-Commerce requires the use of face-coverings in all instructional and research classrooms/laboratories. Exceptions may be made by faculty where warranted. Faculty has management over their classrooms. Students not using face-coverings can be required to leave class. Repetitive refusal to comply can be reported to the Office of Students’ Rights and Responsibilities as a violation of the student Code of Conduct.”

“Students should not attend class when ill or after exposure to anyone with a communicable illness. Communicate such instances directly with your instructor. Faculty will work to support the student getting access to missed content or completing missed assignments.”

Class Topics & Schedule:

Week #	Week of	Course Topics
1	24-Aug	The Art of Estimating / Overview of the Estimating and Bidding Process / Introduction to Excel
2	31-Aug	Fundamentals of the Quantity Takeoff
3	7-Sep	Concrete / Masonry / Metals / Woods, Plastics, and Composites
4	14-Sep	Thermal and Moisture Protection / Openings / Finishes / Fire Suppression
5	21-Sep	Plumbing / HVAC / Electrical / Earthwork
6	28-Sep	Exterior Improvements / Utilities
7	5-Oct	Exam I
8	12-Oct	Material Pricing / Labor Productivity and Hours
9	19-Oct	Labor Rates / Equipment Costs
10	26-Oct	Crew Rates / Subcontract Pricing
11	2-Nov	Markups / Pricing Extensions
12	9-Nov	Avoiding Errors in Estimates / Submitting the Bid
13	16-Nov	Project Buyout / The Estimate as the Basis of the Schedule
14	23-Nov	TGB
15	30-Nov	Ethics / Converting Existing Forms / Creating New Forms / Proposals and Beyond
16	7-Dec	Exam II