Abilene Approval Chart for Curriculum Changes

A = Approve I = Information Item R = Respond In Writing

Course Number: CMGT 315 or Degree Plan(s):

	Campus-Level Academic Review[1]	Dept./School	College	Dean	TEC	AUAC/Grad	Provost
	Change to a Course Include signatures from all chairs/program directors for cross-listed courses.[1]						
1.	Title (description unchanged)	A	A	A	I	I	I
2.	Description (not affecting content)	A	A	A	I	I	I
3.	Course term(s)	A	I	A	I	I	I
4.	Content (change of course outcomes)	A	A	A	I	I	A
5.	Number of credit hours	A	A	A	A	A	A
6.	Course number within the hundred	A	A	I	I	I	I
7.	Course number beyond the hundred	A	A	A	A	A	A
8.	Prerequisites	A	A	A	I	I	I
9.	Course restriction (e.g., majors only, junior standing)	A	A	A	A	A	A
10.	Level change (U to G *or* G to U)	A	A	A	A	A	A
11.	Cross list course	A	A	A	A	A	A
12.	Department of record	A	A	A	A	A	A
13.	Open or close a course	A	A	A	A	A	A
	Change to a Degree Plan						
14.	Educational Program — Revise	A	A	A	A	A	A
15.	Educational Program — Adopt/revise admission requirements	A	A	A	A	A	A
16.	GPA — Revise program-required GPA	A	A	A	A	A	A
17.	Minor — Revise	A	A	A	A	A	A

	Full Review	Dept./School	College	Dean	TEC	AUAC/Grad	Provost	Campus Faculty	Senior VPAA	President
	Change to Catalog Information (for Campus)									
18.	General requirements for Bachelor's and Associate Degrees	–	–	–	–	A	A	A	A	I
19.	Policies governing academic probation and suspension	–	–	–	–	A	A	A	A	I
20.	Requirements for graduating with honors	–	–	–	–	A	A	A	A	I
	Change to a Degree Plan									
21.	Educational Program — Add or Discontinue[2] [3]	A	A	A	A	A	A	A	A	I
22.	Educational Program — Discontinue (Provost-proposed)	R	–	R	A	A	A	A	A	I
23.	Minor — Add or Discontinue	A	A	A	A	A	A	–	A	I
24.	Minor — Discontinue (Provost-proposed)	R	–	R	A	A	A	–	A	I
25.	Degree — Add or Discontinue	A	A	A	A	A	A	A	A	I
26.	Degree — Discontinue (Provost-proposed)	R	–	R	A	A	A	A	A	I

	Change to General Education Requirements for Undergraduates (System)	Dept./School	College	Dean	AUAC	Provost	UGEC	University Faculty	Senior VPAA	President
27.	Change course outcomes of an included course	A	A	A	A	A	A	–	A	I
28.	Add or drop a required course from the General Education Requirements	A	–	A	–	A	A	A	A	I
29.	Add or drop a course from a menu within the General Education Requirements	A	–	A	–	A	A	–	A	I
30.	Comprehensive revision of General Education Requirements	–	–	–	–	A	A	A	A	I

Notes

[2] Any change to a cross-listed course requires the signature of both department chairs or program directors overseeing the course to ensure that the courses stay in sync. This includes courses taught at other campuses (e.g. BIBL 101 and BIBO 101).

[3] For undergraduate majors, a minimum of 30 hours is required. These programs must have a minimum of 6 elective hours, unless the requirements of external accrediting bodies make it impossible. Master's programs must include a minimum of 30 hours, and doctoral programs must include a minimum of 30 hours beyond the master's.

[4] When a department/school or dean proposes closing a program, approval routing follows the typical process beginning with the department/school. An administrative proposal by the provost or senior vice president for academic affairs would follow the "provost-proposed" routing on the chart.

Updated 8/1/2023

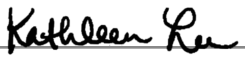
Department/School(s)

3/7/2027

Chair Signature Date

Chair/Program Director Signature Date

College Academic Council(s)



03/19/2026

Chair Signature Date

Chair Signature Date

Dean(s)

3/30/2026

Signature Date

Signature Date

Teacher Education Council

Signature Date

Campus Academic Council:
Abilene Undergraduate or Abilene Graduate

Signature Date

Provost

Signature Date

University General Education Council

Signature Date

University Faculty

Abilene Faculty Senate Chair signature Date

Dallas Faculty Council Chair signature Date

Senior Vice President for Academic Affairs

Signature Date

President

Signature Date

Abilene New Course Application

You may delete the preceding instructional pages before submitting application.

Course ID (*Subject Code and Number)*	CMGT 315

1. Systems and Catalog Information Complete each item.

A	Course Developer	Tim Kennedy
B	Course Instructor	A member of the Civil Engineering or Construction Management Faculty
C	Course Title	Advanced Estimating
D	Course Abbreviation for Banner if title is more than 30 characters	Advanced Estimating
E	College	OSE - Onstead Science and Engineering
F	Department or School	PHYS - Engineering & Physics
G	Number of Credit Hours	3
G1	Number of Lecture Contact Hours	3
G2	Number of Lab Contact Hours	0
H	Is the course for a fixed or variable number of credit hours?	Fixed If variable, explain rationale:
I	Is the course repeatable for additional credit?	No
J	Maximum total number of credit hours a student can earn for this course	
K	Course Schedule Type	Lecture (LEC) See Schedule Type definitions in the Reference section.
L	Number of Faculty Workload Hours	3
M	Grading Mode	Standard
N	Maximum Enrollment	40

O	**Catalog Description** (50 words or less)	This course consists of an advanced study of construction estimating with emphasis on quantity takeoff, labor and equipment costing, and material pricing. Students interpret plans, develop detailed estimates, and apply industry-standard digital takeoff tools to prepare accurate cost projections for diverse construction systems.
P	List any prerequisites (course/s, test scores, class standing, major, etc.)	CMGT 215
Q	List any corequisites (these *must* be taken at the same time; note that a single requirement cannot be both a prerequisite *and* a corequisite)	NA
R	If the course is cross-listed, specify the subject code and course number of the other course	NA
S	Does this course require any additional student course fees?	No If yes, attach a completed course fee form (see form "Request to Add or Change Course Fees").
T1	Will the course be offered in **fall** terms?	Yes, every year
T2	Will the course be offered in **spring** terms?	No
T3	Will the course be offered in **summer** terms?	No
U	First semester this course will be offered under new Course ID. *May not be earlier than the coming fall semester.*	Fall 2027
V	Is this course required for a program(s)?	Yes If yes, submit a separate completed curriculum proposal to change the program(s).
W	Should the addition of this course be retroactively applied to the degree plan it supports? *This is rare, and rationale should explain compelling extenuating circumstances.*	No If yes, provide rationale:

X	Has this course been offered as a Special Topics course? *New courses are not required to be taught as Special Topics courses prior to approval.*	No If yes, provide course ID, term, and enrollment:
Y	List any courses in which the content overlaps the proposed course. (Course ID and Name). *Attach a statement from the instructor/dept chair of the existing course justifying the new offering.*	

2. Curriculum

A. Explain any effects of this course on any degree plans. If the addition of the course alters program requirements, submit a separate Approval Chart for Curriculum Change to update the program.
This course is for the new Construction management degree and will not have affect on existing programs.

B. Justify the addition of this course to the current curriculum, explaining the gap it meets.

This course is required for the Construction Management program to meet ACCE student learning outcomes related to detailed quantity takeoff, cost analysis, and bid preparation. It fills the curricular gap between introductory estimating and upper-division project controls, ensuring students can perform discipline-specific takeoffs and develop complete cost estimates. Peer CM programs include an advanced estimating course at this level to prepare students for internships and industry-ready estimating responsibilities.

3. Course Design

A. Audience and Course Goal
   1. Describe the intended audience, including prerequisite skills.
   2. State the overarching course goal(s) in performance terms.

B. Student Learning Outcomes and Measurements

	Student Learning Outcome	**Measurement**
1	Describe the steps taken to complete an estimate.	Homework, Quiz, Exam
2	Perform basic operations in Excel including managing workbooks, entering data, formatting worksheets, and printing.	Homework, Project

3	Prepare quantity takeoffs for concrete elements including footings, columns, walls, beams, slabs, and related components.	Homework, Quiz, Exam
4	Prepare quantity takeoffs for block, structural brick, and brick veneer.	Homework, Quiz, Exam
5	Prepare quantity takeoffs for structural steel, joists, metal deck, and miscellaneous steel.	Homework, Quiz, Exam
6	Prepare quantity takeoffs for wood framing including sills, posts, girders, joists, walls, headers, rafters, trusses, sheathing, and soffit	Homework, Quiz, Exam
7	Apply estimating procedures to determine quantities for diverse building systems using industry-standard methods.	Homework, Project

C. **Text and Resources**

Give the full publication information of the textbook/s and other required resources and outside readings. For **combined undergraduate/graduate** courses, make two lists:

A. full publication information; label **Undergraduate**.
B. full publication information; label **Graduate**.

Peterson, Steven J., Construction Estimating Using Excel, 2nd ed. pdf available. ISBN-13: 9780138007195

Fundamentals of Construction Estimating (4th Ed.) by David Pratt (ISBN: 978-1-337-39939-5).

4. Supporting Documentation

Required of all applications	
1	**Approval Chart for Curriculum Changes**
2	**Syllabus** — **Attach** the syllabus for the course based upon the anticipated first-semester offering.
4	**Library** — Submit new course application and syllabus to the Library dean's office. **Attach** the Library's memo.

Attach if applicable	
5	**Content Overlap** — Include one document for each course you listed in Section 1Y. **Attach** statement from instructor/dept chair of existing course justifying the new offering.
6	**Departmental Resources** — List the resources that support the course and are available only through the department, if applicable. **Attach** the list of the holdings and the location(s).
7	**Resources** — List resources (other than library or departmental resources) that are needed to support this course (computers, lab equipment, other technology, etc.). **Attach** a complete list of all items and indicate possible sources or estimated cost of each. List the sources of any needed funds.
8	**Expenses** — List additional expenses needed to implement this course (full-time or part-time faculty, graduate or lab assistants, student employees, travel, special student costs, room renovation, storage facility, etc.). **Attach** a complete list of all items, the estimated cost of each and the source of the funds.
9	**Justification** — **Attach** any documents to which you refer in Section 2B.

Link to this document: https://tinyurl.com/acusyllabus

CMGT 312: Advanced Estimating

About the Course

Course number and title: CMGT 312: Advanced Estimating

Credit hours: 3

Semester and year: Fall 2027

Meeting time and place: OSC B61

Prerequisites/corequisites: CMGT 215 Plans and Estimation

Catalog description: This course consists of an advanced study of construction estimating with emphasis on quantity takeoff, labor and equipment costing, and material pricing. Students interpret plans, develop detailed estimates, and apply industry-standard digital takeoff tools to prepare accurate cost projections for diverse construction systems.

Intended audience: This course is intended for underclassmen majoring in Construction Management.

About the Instructor

Professor's name, title, or rank: Sam Hurley, PE, Associate Professor of Practice in Engineering and Physics

Office location (if available): OSC 137D

Phone number(s): 325.674.2454

Email address: sjh@acu.edu

Office hours/Contact expectations: MW 1:00-3:00 pm, TR 8:00-9:30 am

Mission Statements

ACU Mission: The mission of Abilene Christian University is to educate students for Christian service and leadership throughout the world.

College Mission: Please include the mission statement of your college here.

Department Mission: To educate engineers and physicists for Christian service and leadership throughout the world.

Unique Christian Perspective: Estimating is ultimately an exercise in stewardship, honesty, and service, which are all values deeply rooted in the Christian faith. This course emphasizes the estimator's responsibility to provide accurate, transparent, and ethical cost information, reflecting Christ-like integrity in professional practice. Students examine how truthful reporting, fair pricing, and respect for clients, subcontractors, and workers embody biblical principles of justice and neighbor-love. Through discussions, case studies, and project work, students connect technical estimating skills with a Christian commitment to ethical decision-making, responsible resource management, and the pursuit of excellence as an expression of faith.

Course Content

Outline of topics: This course develops advanced competency in construction estimating by guiding students through the full spectrum of quantity takeoff and cost analysis tasks encountered in professional practice. Students begin with the art and process of estimating, including plan interpretation, specification review, and the fundamentals of calculating areas, volumes, and general requirements. The curriculum progresses through discipline-specific takeoffs, covering concrete systems, masonry assemblies, wood framing, structural steel, thermal and moisture protection, openings, and interior finishes. Students further examine mechanical, electrical, and plumbing components to understand their impact on project cost and scope. Emphasis is placed on the development of unit costs, labor and equipment rates, subcontractor pricing, markups, and bid preparation. Throughout the course, students apply industry-standard digital tools and RSMeans data to produce accurate estimates, culminating in a comprehensive term project that integrates quantity takeoff, pricing, and professional bid documentation.

Format of Class: The course is structured to mirror the workflow of a professional estimating environment. Each instructional module begins with targeted readings that introduce the construction system under study, followed by in-class lectures that explain estimating principles, plan interpretation, and RSMeans-based cost development. Sessions regularly incorporate quantitative examples drawn from concrete, masonry, steel, wood framing, finishes, and MEP systems to reinforce calculation methods. Students engage in practical plan-review exercises, digital takeoff demonstrations, and guided practice using industry-standard tools. Weekly homework assignments and periodic quizzes provide structured checkpoints for mastering technical terminology, unit-cost development, and quantity takeoff procedures. The course culminates in a comprehensive estimating project in which students integrate all components of the estimating process, from takeoff to pricing to bid preparation, all reflecting the expectations of real-world construction practice.

Instructional Materials

Textbook: Peterson, Steven J., Construction Estimating Using Excel, 2nd ed. pdf available. ISBN-13: 9780138007195

Fundamentals of Construction Estimating (4th Ed.) by David Pratt (ISBN: 978-1-337-39939-5).

Course Outcomes

	Outcome	**Measurement Instrument**
1	Describe the steps taken to complete an estimate.	Homework, Quiz, Exam
2	Perform basic operations in Excel including managing workbooks, entering data, formatting worksheets, and printing.	Homework, Project
3	Prepare quantity takeoffs for concrete elements including footings, columns, walls, beams, slabs, and related components.	Homework, Quiz, Exam
4	Prepare quantity takeoffs for block, structural brick, and brick veneer.	Homework, Quiz, Exam
5	Prepare quantity takeoffs for structural steel, joists, metal deck, and miscellaneous steel.	Homework, Quiz, Exam
6	Prepare quantity takeoffs for wood framing including sills, posts, girders, joists, walls, headers, rafters, trusses, sheathing, and soffit	Homework, Quiz, Exam
7	Apply estimating procedures to determine quantities for diverse building systems using industry-standard methods.	Homework, Project

Class Activities and Grading

Activities	**Weighting**
Homework	20%
Quizzes	20%
Exams	40%
Projects	20%
Total	**100%**

Final grade calculation:

Range of Points	Final Letter Grade
90%-100%	A
80%- 89%	B
70%-79%	C
60%-69%	D
Below 59%	F

University Resources

I care about your class experience. The university also has a number of resources in place to support the ACU community both in this class and all aspects of university life.

Reporting Violations / Concerns / Complaints

Incident reports alleging violations of Student Conduct or concerns/complaints can be submitted here. Please use the form to submit information about an incident to Student Life / Office of the Dean of Students.

SOAR (Student Opportunities, Advocacy, and Resources):

SOAR partners with faculty, staff, parents and students to assist ACU students and connect them to resources available to support their path to success. For more information about SOAR or to make a SOAR recommendation, see https://acu.edu/soar-program/.

Mental Health Resources

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. Abilene Christian University is committed to supporting students addressing any of these concerns.

You can contact the Medical and Counseling Care Center at counseling@acu.edu, or by calling 325-674-2626. In addition, you can access free confidential counseling services through the Timely Care app by downloading their app on any device.
In a crisis situation contact the National Suicide Prevention Hotline open 24/7 by dialing 988, or call the Police at 911.

Another wonderful resource to help you learn how to manage your stress as a student can be found in your Compass app. The Wellness Badge is designed to help you understand how to

manage your stress and how to do so on our campus. Completing each of the pathways earns you a chance at incentives, and completing the entire badge will earn you 200 chapel points. You can find the badge in your Compass app.

University and Course Policies

ADA Compliance Policy:

Abilene Christian University is dedicated to removing barriers and opening access for students with disabilities in compliance with ADA and Section 504 of the Rehabilitation Act. The ACU website provides more information at https://acu.edu/about/uap/overview-2/about-2/.

Please contact me to discuss any approved accommodations that you require for this class.

Title IX Policy:

At ACU, we strive to comply with all applicable legal requirements prohibiting, preventing, and responding to sexual misconduct against any member of the ACU community. The full Title IX policy and process can be found at https://acu.edu/human-resources/title-ix-and-sexual-misconduct-information/.

Academic Integrity Policy:

Academic integrity is demonstrated by behavior that honors the learning environment, regardless of setting, context, location or modality. ACU's Academic Integrity Policy can be found at https://acu.edu/office-of-the-provost/academic-policies/.

Attendance: Attendance will be taken at the beginning of each class. If for some reason you cannot attend a class, you are required to make the necessary arrangements with the instructor. Each unexcused absence will negatively affect your attendance grade by a full 10% off your final attendance grade. This course is based on teamwork and cannot be done if you are absent.

Tardiness : In the construction industry, "on time" is considered late; being "early" is the standard for professional conduct. For this course "tardiness" is defined as any instance of a student entering the physical or virtual classroom after the scheduled start time or failing to be prepared with required materials (laptop, software loaded, scales ready) when instruction begins.

Impact on Attendance Grade: Attendance is recorded at the start of each session. Two (2) instances of tardiness will be recorded as one (1) unexcused absence.

Participation Deductions: Because estimating requires high attention to detail and team coordination, chronic tardiness (more than 3 instances) will result in a 5% reduction of the total " Participation" grade category. If a student is more than 15 minutes late, they are welcome to join

the session but will be marked absent for the day as they have missed critical project set-up instructions.

Participation： Active participation is vital. You are expected to engage not as a passive observer, but as a "Junior Estimator" within a project team.

Hands-on Engagement: Students are expected to have their laptops open with the relevant plan sets or estimation software (e.g., On-Screen Takeoff) active.

Collaborative Review: Participation includes contributing to "Bid Day" simulations, asking clarifying questions regarding specifications, and participating in peer-reviews of quantity take-offs.

Late assignment/exams:
Students will be accountable for any work or assignments missed in their absence. Students must assume responsibility for viewing all lecture notes/videos, other class information, and for meeting established deadlines.

If an assignment or project is not uploaded or is saved incorrectly in Canvas 50% of the assignment points will automatically be deducted.
Technical difficulties should be addressed with the Help Desk, your classmates, then the instructor, in a reasonable time to resolve the problem before an assignment is due.

Late work is not accepted in construction; bids are due at a specific time and place. Industry practice is that bids submitted after the stated time are not accepted. We will abide by the same approach with all homework and assignments. Any homework or assignment turned in after the stated time will not be accepted.

Technology use：

- Cell phones need to be turned off during class. Cell phone calls, texting, or any other cell phone use will not be tolerated.
- Web surfing during class or during a class exercise is not permitted unless specifically required as part of an assigned work project.

Calendar

Date	Chapters	Topic	Assignment
Week 1	1-3	The Art of Estimating; The Estimating Process; Fundamentals of Quantity Takeoff	Review syllabus & timeline; Obtain required texts and RSMeans access
Week 2	—	Reading and Understanding Plans; Calculating Area and Volume; Specifications; General Requirements; Site Work	Small Project assigned; Complete weekly readings
Week 3	5	Concrete; RSMeans Examples	Complete and submit 1st Homework

Date	Chapters	Topic	Assignment
Week 4	6	Masonry; RSMeans	Complete and submit 2nd Homework
Week 5	—	Catch-Up and Review; Exam 1 (Ch. 1–6)	Prepare for Exam 1
Week 6	8	Woods, Plastics, and Composites	Complete weekly readings
Week 7	9	Thermal and Moisture Protection	Complete and submit 3rd Homework
Week 8	10	Openings (Doors and Windows)	Complete weekly readings
Week 9	11	Finishes	Complete and submit 4th Homework
Week 10	-	Catch-Up and Review; Exam 2 (Ch. 8–11)	Prepare for Exam 2
Week 11	13-15	Mechanical; Electrical	Complete weekly readings
Week 12	19	Material Pricing; Labor Rates; Equipment Costs; Crew Rates;	Complete weekly readings
Week 13	21-29	Subcontractor Pricing; Markups; Pricing Extensions; Avoiding Errors; Submitting the Bid; Project Buyout	Complete and submit 5th Homework
Week 14	—	Term Project Presentations (10-min presentation + 5-min Q&A)	Submit Term Project & Slides by 11:59 PM
Week 15	—	Review for Final Exam	Prepare for Final Exam
Week 16	—	Final Exam	Final Exam as scheduled

****This schedule subject to change in order to facilitate class learning outcomes and objectives.**

ABILENE CHRISTIAN UNIVERSITY

LIBRARY

M E M O R A N D U M

DATE: February 27, 2026

TO: Dr. Tim Kennedy

FROM: Mark McCallon, Associate Dean for Library Services

RE: New Course Proposal, CMGT 312 – Advanced Estimating

The library has examined the course application and syllabus and is able to support the proposed course. Thank you for letting us review the course proposal.

February 25, 2026

Dr. Tim Kennedy
Department Chairperson, Engineering
Onstead Science Center, Rm. 113A
timothy.kennedy@acu.edu

Re: Advanced Estimating (CMGT 312)

Dear Dr. Kennedy,

Thank you for submitting Advanced Estimating (CMGT 312) to us for review. I have reviewed it based on the ACU Syllabus Guidelines. I found that the syllabus meets all aspects of the checklist.

Please note that this letter is intended as a reference, which will be read by the department chair and council members, who may also have questions or comments of their own. If you have any questions, please feel free to let me know.

Please also let me know if we can help in the design and facilitation of this course.

Sincerely,

Amy Boone

Amy Boone
Teaching and Learning Specialist, Adams Center