

Approval Chart for Curriculum Changes

A = Approve I = Information Item¹ R = Advise & Respond²

Course Number ENGR 217 or Degree Plan(s) _____

State the requested change and reason. A memo may be attached if more space is necessary.

See new course packet.

Circle the number that corresponds to the requested change. Degree plan changes are on the second page.

Change to a Course		Dept./School	College Academic	Deans	COUNCIL ³				Provost	President
					TEC	UGEC	UUAC	GRAD		
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 (substantive change)	A	A	A		I			A	I
5.	Number of hours (lecture, lab, contact)	A	A	A		A			A	I
6.	Course number within the hundred	A	A	I		I			I	I
7.	Course number beyond the hundred	A	A	A		A			A	I
8.	Prerequisites	A	A	A		I			I	I
9.	Course fee(s)	A	--	A		--			A	I
10.	From U to G or G to U	A	A	A		A			A	I
11.	Cross list with another department: U or G level	A	A	A		A			A	I
12.	Department of record	A	A	A		A			A	I
13.	Open or close a course	A	A	A		A			A	I
14.	New course — See website for application and process. This change includes combining or splitting a course(s).	A	A	A		A			A	I

Note: When an academic unit does not have a council, the UGEC and/or UUAC will serve as its academic council, depending on the nature of the issue.

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		COUNCIL ³										
	Change to a Degree Plan	Dept./School	College Academic	Deans	TEC	UGEC	UUAC	GRAD	Provost	Faculty	President	Board of Trustees
1.	University Requirements — Change in approved course content ⁶	A	A	A	A				A	--	A	--
2.	University Requirements — Add or drop a required course from the University Requirements chart ⁶	A	A	A	A				A	A	A	--
3.	University Requirements — Add or drop a course from a menu within the University Requirements ⁶	A	--	--	A				A	--	A	--
4.	University Requirements — Change hours within a menu on the University Requirements chart ⁶	A	A	A	A				A	A	A	--
5.	Major — Revision of major ^{4,5}	A	A	A	A				A	--	A	--
6.	Major — Adopt or change admission requirements	A	A	A	A				A	--	A	--
7.	Major — Add ^{4,5}	A	A	A	A				A	A	A	I
8.	Major – Discontinue (proposed by the department or college)	A	A	A	A				A	A	A	I
9.	Major – Discontinue (proposed by the Provost)	See below.										
10.	GPA — Revise major or cumulative requirement	A	A	A	A				A	A	A	--
11.	Minor — Revise course selection	A	A	A	I				I	--	I	--
12.	Minor — Add	A	A	A	A				A	--	A	--
13.	Minor – Discontinue (proposed by the department or college)	A	A	A	A				A	--	A	--
14.	Minor – Discontinue (proposed by the Provost)	See below.										
15.	Degree — Add	A	A	A	A				A	A	A	I
16.	Degree – Discontinue (proposed by the department or college)	A	A	A	A				A	A	A	I
17.	Degree – Discontinue (proposed by the Provost)	See below.										
18.	Any change to a graduate degree program	A	A	A	A				A	--	A	--

COUNCIL ³										
	Provost-Proposed Change	Provost	Department	Dean	TEC	UUAC	Graduate	Faculty	President	Board of Trustees
1.	Major/Graduate Program – Discontinue (proposed by the Provost)	A	R	R	A			A	A	I
2.	Minor – Discontinue (proposed by the Provost)	A	R	R	A			--	A	--
3.	Degree – Discontinue (proposed by the Provost)	A	R	R	A			A	A	I

Approval Chart for Curriculum Changes

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COUNCIL ³									
	Change to the Catalog Information	Dept./School	College Academic	Deans	UGEC	UUAC	GRAD	Provost	President
1.	General requirements for graduation including course requirements that are common to all majors for all degrees ⁷	--	--	--		A		A	A
2.	Admission requirements	--	--	--		A		A	A
3.	Policies governing academic probation and suspension	--	--	--		A		A	A
4.	Requirements for graduating with honors	--	--	--		A		A	A

¹ Councils may request additional information about "Information" items. These items are approved as "Consent Agenda."

² The Dean and Department should respond to the Provost's recommendation to close a program in writing. Advise & Respond (R) requires that the voting body should receive the written responses at least one week prior to the vote.

³ All courses that meet University Requirements for general education must go through UGEC. Courses or degrees offered only to students seeking teacher certification must go through the Teacher Education Council. All undergraduate changes must go before the UUAC. All graduate degree plan changes must go through the Graduate Council.

⁴ A minimum of 30 hours is required for a major. A maximum is specified for each degree (e.g., BA, BS). The university minimum for elective hours is 6, unless the requirements of external accrediting bodies make it impossible.

⁵ Program or course changes that apply to any major that includes Teacher Certification will be reviewed by the college, the Teacher Education Council (TEC), and then the UUAC.

⁶ Courses that satisfy ACU's University Requirements (General Education) will normally have lower-level numbering, be free of prerequisites and co-requisites, appeal to more than one or two majors, and "not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession" (SACS 2.7.3). Departments may request exceptions to the first three criteria.

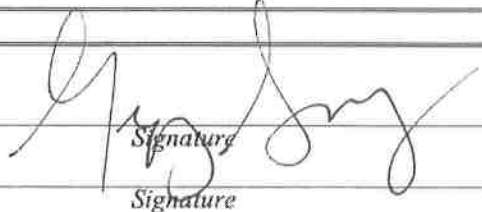
⁷ The UUAC approved the clarification that "general requirements for graduation" means the enumerated items in the "General Requirements for Bachelor's Degrees" section of the catalog.

Revised 8-26-19

Curriculum/Catalog Changes Signature Page

Department/School Chair(s)	
 Signature	1/21/2020 Approval date
_____ Signature	_____ Approval date

College Academic Council(s)	
 Signature	1-24-2020 Approval date
_____ Signature	_____ Approval date

Dean(s)	
 Signature	1/29/2020 Approval date
_____ Signature	_____ Approval date

Teacher Education Council	
_____ Chair's signature	_____ Approval date

General Education Council	
_____ Chair's signature	_____ Approval date

Undergraduate Academic Council	
_____ Chair's signature	_____ Approval date

Graduate Council	
_____ Chair's signature	_____ Approval date

Provost	
_____ Signature	_____ Approval date

Faculty	
_____ Chair of faculty senate	_____ Approval date

President	
_____ Signature	_____ Approval date

Application for a New Course v10.7

Discard instructional pages A-C before submitting application

Course ID (<i>Subject and Number</i>)	ENGR 217: Engineering Career Skills
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I. Systems and Catalog Information Complete each item.

1	Course Developers	Robert Brown, Darby Hewitt, Timothy Kennedy, Scott Marshall, Ray Smith
2	Course Instructor	Any member of the engineering program faculty
3	Course Title	Engineering Career Skills
4	Course Abbreviation for Banner if title is more than 30 characters	-
5	College	Arts and Sciences
6	Department or School	Engineering
7	Number of Credit Hours	1
8a.	Number of contact hours – lecture	0
8b.	Number of contact hours – lab/activity	1.5
9	Is the course for a fixed or variable number of credit hours?	fixed
10	Explanation for variable credit	
11	Is the course repeatable for additional credit?	no
12	Maximum total number of credit hours a student can earn for this course	1
13	What type of course is this? (Select one option. Please see Schedule Type definitions on Page C.)	☐ Traditional lecture ☐ Traditional lab ☒ Traditional lecture/lab ☐ Experiential Learning ☐ Seminar ☐ Studio ☐ Thesis ☐ Dissertation

14	Number of faculty workload hours	1.5
15	Grade Mode	☒ Standard ☐ Credit/No Credit (undergrad only)
16	Maximum Enrollment	20
17	Catalog Description (50 words or less)	Development of professional skills through a discipline-specific project. Emphasis placed on software skills and career readiness. Combined lab and lecture format.
18	List any prerequisites (course/s, test scores, class standing, major, etc.)	ENGR 117 and ENGR 131
19	List any corequisites (these <i>must</i> be taken at the same time; note that a single requirement cannot be both a prerequisite <i>and</i> a corequisite)	None
20	If the course is cross-listed, specify the Course ID(s)	
21	Does this course require any additional student course fees?	☐ No ☒ Yes If yes, attach a completed "Request to Add or Change Course Fees" form. Describe in section IV-8.
22a	Will the course be offered in fall terms?	☐ No ☒ Yes If yes: all, even, or odd years?
22b	Will the course be offered in spring terms?	☒ No ☐ Yes If yes: all, even, or odd years?
22c	Will the course be offered in summer terms?	☒ No ☐ Yes If yes: all, even, or odd years?
23	First semester this course will be offered under new Course ID. <i>May not be earlier than the coming fall semester.</i>	Fall 2020
24	Is this course required for a degree/s?	☐ No ☒ Yes If yes, attach a revised degree plan(s) reflecting the placement of the new course.

25	Should the addition of this course be retroactively applied to the degree plan it supports? <i>This is rare, and rationale should explain compelling extenuating circumstances.</i>	☒ No ☐ Yes If yes, provide rationale:
26	Has this course been offered as a Special Topics course? <i>New courses are not required to be taught as Special Topics courses prior to approval.</i>	☐ No ☒ Yes If yes, provide course ID, term, and enrollment: Spring 2020, ENGR 240, enrollment unknown
27	List any courses in which the content overlaps the proposed course. (Course ID and Name) <i>Attach a statement from the instructor/dept chair of the existing course justifying the new offering in Section IV-D.</i>	None.

II. Curriculum

- A. Explain effect on degree plans. If the addition of the course alters degree requirements, submit a separate Approval Chart for Curriculum Change to update the degree plan.

Engineering students entering in Fall 2020 and beyond will be required to take this course as part of the BSE degree plan. The extra hour for this course fits into a 2-hour elective block that is already included in the degree plan.

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

We are adding this as a result of the 20/20 grant to better prepare engineering students for the engineering industry. It is the second course in the ProPEL sequence of 4 classes. The course will provide student with discipline-specific software that is in demand by industry.

III. Course Design

- A. Audience and Course Goal

- Describe the intended audience, including prerequisite skills.
Sophomore engineering students who have completed ENGR 117 and 131. We expect basic CAD and programming knowledge.
- State the overarching course goal(s) in performance terms.
To prepare students for success in applying for and participating in internship and other employment opportunities.

- B. Student Learning Outcomes and Measurements

	Student Learning Outcome	Measurement
1	Analyze results of discipline-specific software	Homework, project
2	Demonstrate proficiency in the use of discipline-specific software	Homework
3	Communicate about the results or designs produced using discipline-specific software, both orally and in writing	Project report and presentation.

3. Text and Resources

- A. No textbook required. Course notes available through Canvas.

IV. 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.
3	Instructional Design — The syllabus must be reviewed by the Adams Center. Attach a copy of the Adams Center letter.
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 I-27. 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 II-B.

ENGR 217: Engineering Career Skills

Course Basics

Credit hours: 1

Semester and year: Fall 2020

Meeting time and place: Class meets in Onstead Science Center, Room 342 on Tuesdays from 12:00pm-1:20pm

Prerequisite: ENGR 117 and 131

Catalog description: Development of professional skills through a discipline-specific project. Emphasis placed on software skills and career readiness. Combined lab and lecture format.

Intended audience: Sophomore engineering majors.

Name: Dr. Tim Kennedy, P.E.
Office: Onstead 137D
Phone: 325-674-2854
Email: timothy.kennedy@acu.edu
Office hours: M 3-4, T 1-4, and R 9:30-11 and 1-2:30

Mission Statements

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

College of Arts and Sciences Mission: The College of Arts and Sciences engages students with humanity's greatest ideas to create understanding, apply insights, and serve the world as Christian thinkers and problem solvers.

Engineering Program Mission: The ACU engineering program strongly supports the university's mission of educating students for Christian service and leadership throughout the world. In support of this mission, ACU engineering graduates will attain:

- a deep and broad understanding of engineering principles and practices as evidenced by professional employment, continued professional development, and graduate study in engineering or other professional fields.

- an extensive knowledge of the innovative design processes unique to engineering professionals as demonstrated by using critical thinking skills to contribute to the scientific and technical literature, patents and intellectual property, professional societies, and creative designs.
- a thorough understanding of Christian service and leadership as shown in their commitments to professionalism, ethics, and service and leadership within the engineering profession, the church, and society.

Unique Christian Perspective: As a Christian engineer, I believe you can best glorify God by excelling in your chosen profession, and doing so morally and ethically. The foundation of this excellence is technical proficiency, without which moral and ethical concerns cannot be addressed. This course is intended to provide you with technical skills required for a moral and ethical engineer.

Course Content

Outline of topics:

- Engineering report writing
- Resume building
- Professional networking
- Discipline-specific software skills

Format of Class

Format of Class: Each class module will consist of an in-class exercise and homework, all culminating in a final project.

Instructional Materials

Textbook: No textbook required. Course notes provided through canvas.

Learning Outcomes

Course goal: To prepare students for success in applying for and participating in internship and other employment opportunities.

Competencies:

Competency	Measurement Instrument
Analyze results of discipline-specific software	Homework, Final Project
Communicate about the results or designs produced using discipline-specific software, both orally and in writing	Final Project, Project Presentation
Demonstrate proficiency in the use of discipline-specific software	Homework, Final Project

Assessment and Grading

Assessment Activities	Weighting
Resume/LinkedIn	10%
Weekly Homeworks	40%
Final Project	30%
Project Presentation	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 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 Alpha Scholars Program facilitates disability accommodations in cooperation with instructors. In order to receive accommodations, you must be registered with Alpha Scholars Program, and you must complete a specific request for each class in which you need accommodations. If you have a documented disability and wish to discuss academic accommodations, please email alpha@acu.edu call their office directly at 325-674-2667.]

Academic Integrity Policy

"Academic integrity is defined as academic work completed as assigned for each class by the individual or group responsible for the work. Violations of academic integrity and other forms of cheating involve the intention to deceive, mislead, or misrepresent and therefore, are a form of lying. Such actions are contrary to behavioral norms that flow from the nature of God. Academic misconduct includes, but is not limited to, the following: 1) Failure to give credit to sources used in a work in an attempt to present the work as one's own, 2) Submission of papers or projects obtained from another source (e.g., research service or club paper file) as one's own, and 3) Falsifying information orally or in writing. Academic misconduct may result in, but is not limited to, a zero on the assignment and/or an F in the course. Additionally, the department chair, Dean of your school, and the Dean of Student Life will be notified. See the full university policy, including how to appeal a decision, by following [this link](#)."

Anti-Harassment Policy:

As a professor, one of my responsibilities is to help create a safe learning environment on our campus. I also have a mandatory reporting responsibility related to my role as a professor. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep the information you share private to the greatest extent possible. When I am not able to keep your information confidential, I will only share it with responsible administrators on campus who can provide you with services and resources. I am required to share with the Title IX Coordinator information regarding sexual misconduct or harassment, dating or domestic violence or stalking that you report to me. If you would prefer to share information in a confidential setting, I encourage you to speak with someone in the [ACU Counseling Center](#). All of your options are available for review by clicking on the link to ACU's [policy](#).

Course Policies

Attendance

Students are required to attend at least 80% of class meetings in order to receive credit for the course. If you miss more than 20% of the classes, you will be dropped from the class with a WF.

Communication

ACU email, and/or Canvas are the two official forms of class communication. General announcements and supplementary course materials will be posted on Canvas, and Canvas will also be used to report grades. Announcements that are time sensitive will be sent via ACU email.

Classroom rules

Cell phones should be placed on 'Silent' mode while in class. In the case of an emergency you may answer your phone and quietly leave the room and return when you have finished your call. It is not in your best interest to text while in class.

Laptops, tablets, etc. are not permitted to be used in the classroom unless they are being utilized as part of an in-class activity. Students will be provided notice ahead of time when a laptop will be beneficial to have in class.

Professional Behavior

Engineers are expected to behave in a professional manner. For the purposes of this course, professionalism means that students show up on time, are prepared, are engaged, treat peers and the instructor with respect (both verbally and in written communication), and do not engage in disruptive classroom activities. Disruptive activities include but are not limited to: inappropriate use of phones, computers, tablets, etc.; "sidebar" conversations during class discussions or presentations, arriving late, leaving or packing up early, and repeatedly exiting and entering the classroom.

Removal from course

The instructors reserve the right to remove from the course any student whose behavior is disruptive to the learning environment for students or faculty.

DEPARTMENT POLICIES

Calculators

If the course instructor determines that calculators may be used during the exams or other in-class graded activities, only NCEES approved calculators will be permitted. This is to help you begin preparing for the FE exam. Also per NCEES policy, software that simulates approved calculators will not be permitted. The NCEES policy may be reviewed at <http://ncees.org/exams/calculator-policy>. If you are unsure about your calculator, it is your responsibility to check with the instructor for approval. If you are caught using a non-approved calculator, you will not be allowed to complete the activity, and you will receive a zero for that activity (including tests).

The approved calculators include the following:

- Hewlett Packard – HP 33s, HP 35s, and no other
- Casio – All FX-115 models. Any Casio calculator must contain FX-115 in its model name.
- Texas Instruments – All TI-30X and TI 36X models. Any TI calculator must contain either TI-30X or TI-36X in its model name.

Late work: In order to assist students in developing the discipline of meeting deadlines, assignments must be turned in on time in order to receive credit. Students who are absent, for any reason and

including absences for University approved activities, on the day an assignment is due should contact the instructor before the assignment is due for directions.

Engineering computation paper: All handwritten quantitative homework solutions must be submitted on engineering paper. ESA engineering paper may be purchased from ESA in Mr. Chad Longley's office. Each page should be labeled as indicated on the ESA pages, or as follows on other engineering paper:

<i>Student Name</i>	<i>Date submitted</i>	<i>Course and Assignment</i>	<i>Pg #</i>
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Calendar

Week/Day/ Module	Topic	Assignments/Assessment
Week 1	Course introduction/Resumes	Homework 1
Week 2	Engineering Report Writing I	Homework 2 - Technical Memo & Plot Annotation
Week 3	Engineering Report Writing II	Homework 3 - Revision and Editing
Week 4	Software Introduction	Homework 4
Week 5	Basic Software Topics I	Homework 5
Week 6	Basic Software Topics II	Homework 6
Week 7	Intermediate Software Topics I	Homework 7
Week 8	Intermediate Software Topics II	Homework 8
Week 9	Advanced Software Topics I	Homework 9
Week 10	Advanced Software Topics II	Homework 10
Week 11	Advanced Software Topics III	Homework 11
Week 12	Introduce Final Project	Final Project
Week 13	Work on Final Project	
Week 14	Work on Final Project	
Week 15	Presentations	Final Presentation/Final Project Report Due

* Instructor reserves the rights to modify the calendar when needed.

Dr. Tim Kennedy
Onstead Science Center 137D
Timothy.kennedy@acu.edu
325-674-2854

October 30, 2019

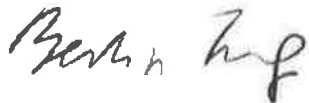
Re: Review of ENGR217

Dear Dr. Kennedy,

Thank you for submitting ENGR217: Engineering Career Skills. I have reviewed it based on the ACU Syllabus Guidelines. I find the syllabus to be meeting all requirements. One concern that I have is that the syllabus does not seem to include a tardiness policy. You might want to add that, but there is no need to bring the syllabus to the Adams Center for further review.

Please note that this letter is not meant to be a final approval in the course application process. Your department chair and members of the council may 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 be of any help in the design and facilitation of this course.

A handwritten signature in black ink, appearing to read "Bernice H. H. H." with a stylized flourish at the end.

Director of Instructional Design, Adams Center

ABILENE CHRISTIAN UNIVERSITY

LIBRARY

M E M O R A N D U M

DATE: 15:26
TO: Dr. Tim Kennedy
FROM: Mark McCallon, Associate Dean for Library Services
RE: New Course Proposal, ENGR 217 – Engineering Career Skills

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.



Request to Add or Change Course Fees

Course fees or changes to existing course fees must be approved and published in the ACU Catalog for the following year in order for them to be assessed on a student's account. Course fees which are not processed by February 1st will not be included in the fall catalog.

Request Date 11/30/2019

Amount of Fee \$70

Department Making Request Engineering and Physics

Contact Person CAS Dean

Semester and year for fee to begin : Fall 2019

Check the appropriate fee category below:

FOAP: 202812 20580 8105 10 \$63

☒ Fee is the same for every section and every student

202034 20500 8105 10 \$7

☐ Fee applies to certain sections only

If fee applies to certain sections only, please specify below if it is a one-time fee for a single section or a repeating fee that will be applied on a regular schedule (e.g., a fee charged each time the course is taken in a summer session but not in the fall or spring).

This request applies to the following course (one per form):

Course Number / Section

Course Title

ENGR 217

Engineering Career Skills

State the justification for your request below. You will be notified of final approval or denial.

Support of Laboratory experience

The following signatures must be obtained before any request is approved.

Approved

Declined

Department Chair

Date

College Dean

Date

Provost

Date

Vice President for Finance

Date

If approved by all above, route to:

Controller

FOAP

Date Completed

Finance

Fee Code for use on course

Date Completed

Registrar's Office

Date Completed