

Approval Chart for Curriculum Changes

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

Course Number ENGR 131 _____ or Degree Plan(s) _____

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

A change to the number of credit hours for ENGR 131 – CAD and Modeling from three (3) hours to one (1) hour is requested. This course is well suited for lab style presentation with an emphasis on experiential learning of computer modeling and technical drawing applications during a weekly session of three (3) contact hours. Laboratory courses of this type are normally assigned one (1) hour of credit.

The course designation should be changed from LEC to LAB and the CAS Student Lab Fee be added to the course.

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

				COUNCIL ³						
	Change to a Course	Dept./School	College Academic	Deans	TEC	UGEC	UUAC	GRAD	Provost	President
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	A
5.	Number of hours (lecture, lab, contact)	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 fee(s)	A	--	A		--			A	I
10.	From U to G or G to U	A	A	A		A			A	A
11.	Cross list with another department: U or G level	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
14.	New course — See website for application and process. This change includes combining or splitting a course(s).	A	A	A		A			A	A

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						Provost	Faculty	President	Board of Trustees
		TEC	UGEC	UUAC	GRAD						
Change to a Degree Plan		Dept./School	College Academic	Deans							
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	Faculty	President	Board of Trustees
		Provost	Department	Dean	TEC	UUAC	Graduate				
Provost-Proposed Change											
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

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

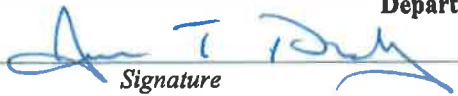
⁵ Program or course changes that apply to any major that includes Teacher Certification will be reviewed by the college, the Teacher Education Council (TEC), and then the UUAC.

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.

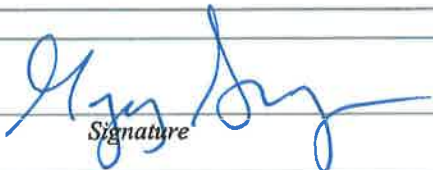
⁷ The UUAC approved the clarification that "general requirements for graduation" means the enumerated items in the "General Requirements for Bachelor's Degrees" section of the catalog.

Revised 3-8-17

Curriculum/Catalog Changes Signature Page

Department/School Chair(s)	
 <i>Signature</i>	10/30/18 <i>Approval date</i>
<i>Signature</i>	<i>Approval date</i>

College Academic Council(s)	
 <i>Signature</i>	11-20-18 <i>Approval date</i>
<i>Signature</i>	<i>Approval date</i>

Dean(s)	
 <i>Signature</i>	11/21/18 <i>Approval date</i>
<i>Signature</i>	<i>Approval date</i>

Teacher Education Council	
<i>Chair's signature</i>	<i>Approval date</i>

General Education Council	
<i>Chair's signature</i>	<i>Approval date</i>

Undergraduate Academic Council	
<i>Chair's signature</i>	<i>Approval date</i>

Graduate Council	
<i>Chair's signature</i>	<i>Approval date</i>

Provost	
<i>Signature</i>	<i>Approval date</i>

Faculty	
<i>Chair of faculty senate</i>	<i>Approval date</i>

President	
<i>Signature</i>	<i>Approval date</i>

CAD and Modeling – ENGR 131
Abilene Christian University
Fall 2019

Class Meeting Times: Mondays 2:00—4:50 PM in Onstead Room B35

Instructor: Rich Jinkerson, P.E., Associate Professor of Engineering & Physics

Office: Onstead Science Center 121A

Office Hours: MWF 9-11 AM, TuTh 3-5 PM, or by appointment

Email: richard.jinkerson@acu.edu

Office Phone: 325-674-4815

Cell: (817) 454-6163 (text or call)

Catalog Description

An introductory course in the use of computer aided design (CAD) software for drafting, engineering design and 3D modeling. **Credit hours: 1**

Intended Audience

This course is required for Engineering majors and is normally completed during their first or second year in the program. Non-majors who are interested in developing technical skills in computer aided design may also enroll in the course. Basic computer skills and college level geometry competency are required for all students.

Required Text and Software

Text: *Autodesk Inventor 2019 and Engineering Graphics – An Integrated Approach*, Randy Shih, SDC Publications, 2018.

Software: *Autodesk Inventor Professional 2016*; software access will be provided at student workstations or students may obtain free license for installation on personal computers at the website: <https://www.autodesk.com/education/free-software/inventor-professional>.

Learning objectives

The activities of this course support the assessment of ABET General Criterion 3 for Student Outcomes: (g) an ability to communicate effectively and (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Class Format and Schedule

Each class period will generally have a brief presentation of theory and process for the day's experiments with the majority of class time available for completion of assigned work. The class will use Canvas for assignments and detailed course information will be available there.

Attendance

Attendance with prompt arrival is expected for all class sessions. Students are required to attend at least 80% of class meetings in order to receive credit for the course. Excessive absences without approval of the instructor will result in a lowering of the final grade.

Grades

Assignments for this course will be made in Canvas and will normally be due no later than 6 PM on the assigned class date, although additional time may be provided for more complex assignments. Assignments will be uploaded to Canvas for grading and late assignments will not be graded. A portion of the final grade will be based upon individual and group participation in projects that will include 3D CAD modeling, 3D printing of models, and animation and presentation of models. Late projects will not be graded.

Calculation of Final Grade

The final grade for this course will be an average percentage based upon assignments, projects and professionalism with the following weights:

Assignments	50%
First Project	15%
Final Project	25%
Professionalism	10%

90% and above	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
59% and below	F

Academic Integrity

Violations of academic integrity and other forms of cheating, as defined in ACU's Academic Integrity Policy, involve the intention to deceive, mislead or misrepresent. They are a form of lying that represent actions contrary to behavioral norms that flow from the nature of God. Violations will be addressed as described in the Policy, but the most powerful motive for integrity and truthfulness comes from one's desire to imitate God's nature in one's life. Every member of the faculty, staff and student body is responsible for protecting the integrity of learning, scholarship and research. The full Policy is available for review at the Provost's office website (<http://www.acu.edu/community/offices/administrative/office-of-the-provost/academic-integrity-policy.html>). Review of this policy is encouraged.

The mission of ACU

To educate students for Christian service and leadership throughout the world.

The mission of the College of Arts and Sciences

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.

The mission of the Engineering and Physics Department

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 in contribution to scientific and technical literature, patents and intellectual property, professional societies, and creative designs.
- A thorough understanding of Christian service and leadership as shown in commitments to professionalism, ethics, and service and leadership within the engineering profession, church and society.

ADA Compliance Statement

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 call the office directly at (325) 674-2667.