

Abilene Approval Chart for Curriculum Changes

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

Course Number: DET 380 – Game Engines II

New course application

		Dept./School	College	Dean	TEC	AUAC/Grad	Provost
	Campus-Level Academic Review¹						
	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

		Dept./School	College	Dean	TEC	AUAC/Grad	Provost	Campus Faculty	Senior VPAA	President
	Full Review									
	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 ²³	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

		Dept./School	College	Dean	AUAC	Provost	UGEC	University Faculty	Senior VPAA	President
	Change to General Education Requirements for Undergraduates (System)									
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)

John Homer

February 27, 2024

Chair Signature

Date

Chair/Program Director Signature

Date

College Academic Council(s)

Arisoa Randrianasolo
Arisoa Randrianasolo (Aug 20, 2024 15:39 CDT)

Aug 20, 2024

Chair Signature

Date

Chair Signature

Date

Dean(s)

Laura Phillips

Aug 21, 2024

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

Instructions

- Consult with the Registrar's Office to confirm a course number and ask any questions about effects on related degree plans.
- Complete the New Course Application.
- Create the course syllabus. Refer to the Syllabus Checklist and consult with the Adams Center Instructional Design team with any questions.
- Submit the application and syllabus to the Adams Center Instructional Design team by email to Scott Hamm for review and recommendations.
- Submit the application and syllabus for library review to Associate Dean Mark McCallon.
- Compile the full application and attachments. This includes at a minimum the approval chart, new course application, syllabus, and letters reviewing the syllabus and library support.
- Conduct departmental vote to approve addition of the course.
- Submit to College Academic Council.
- Your college will route the application from this point. The department chair will be notified of necessary meetings with university councils.

The course developer completes this application with all relevant supporting documentation before the new course is reviewed by the department or any academic council.

Syllabus Checklist

NOTE: It is not necessary to submit this checklist with the New Course Application. The checklist is used by the Adams Center in syllabus review. All items below are required unless otherwise marked.

About the Course

- Course number and title
- Credit hours
- Semester and year
- Meeting time and place (if face-to-face)
- Prerequisite/corequisite

About the Instructor(s)

- Name and title or rank
- Office location
- Phone number(s)
- Email address
- Office hours / contact expectations

Mission Statements

- ACU mission statement
- College mission statement
- Departmental mission statement
- Personal mission statement (optional)

Unique Christian Perspective

- Description of how learning and Christian faith are integrated in the course

Course Content

- Catalog description
- Intended audience
- Outline of topics
- Format of course/types of activities
- student should expect in the course

Teaching/Learning Methods and Format of Class Sessions

- Description of the types of activities students should expect in the course

Materials

- Required and optional materials, including textbooks, etc.

Student Learning Outcomes/Measurements

- Specific outcomes stated in measurable terms
- Assignments or instruments that will be used to assess the outcomes

Assessment/Grading Criteria

- Complete and accurate details of factors and elements that will compose the final grade
- Weight or point value of all graded elements
- Grading scale with expectations for letter grades
- Extra credit opportunities (optional)

University Policies

- Special needs policy — ADA
- Academic integrity policy and link
- Title IX policy

Course Policies

Expectations and consequences regarding:

- Attendance (if face-to-face)
- Tardiness (if face-to-face)
- Participation
- Course-specific academic integrity information
- Late assignment/exam policy

Course Calendar

Calendar is not required for New Course Application, but it must be included in all syllabi distributed to students.

- Exam dates
- Assignments
- Due dates and other deadlines
- Schedule of readings and topics
- Statement to reserve right to modify the calendar as necessary

Reference

Schedule Type definitions for Section 1K.

Traditional Lecture	Traditionally formatted course that may include a variety of teaching methods.
Traditional Lab	Usually affiliated with lecture course. Provides application of knowledge and learning experiences related to lecture content.
Traditional Lecture/Lab	Traditionally formatted course that may include a variety of teaching methods, and for which a lab experience is included and graded with the lecture portion of the course. One grade for both.
Experiential Learning	Application of knowledge or a learning experience not typically connected to a lecture course. Examples include theatre workshop, field experience, practicum, internship and active research courses.
Seminar	Course in which a topic is discussed by a teacher and a small group of students. Examples include colloquia and workshops.
Studio	Application of knowledge or a learning experience that combines lecture, active learning and discussion among the teacher and students in a studio environment. Examples include art, design and music.
Thesis	Required course for students working on graduate thesis.
Dissertation	Required course for students working on doctoral dissertation.

Guidance for writing student learning outcomes in Section 3B.

	Student Learning Outcome	Measurement
	<i>Instructions:</i> Outcomes should be observable and measurable, and stated in terms of student performance. It can be helpful to complete the sentence “Students will be able to...” If the outcomes are primarily cognitive, consider using Bloom’s Taxonomy to evaluate whether the competencies are at an appropriate level for the course. In the rarer instances where affective or psychomotor competencies are used, give careful attention to measurement techniques.	<i>Instructions:</i> Detail the instrument that will be used to gather the measurement. Examples might include: written papers, quizzes, tests, verbal presentations, video, audio, portfolio artifacts, demonstrations, performances, etc. This column should indicate where you will look for evidence of the type of student work that you expect.
1	Defend dietary goals in light of current research.	Weekly Reading Journal, Research Paper
2	Examine personal values, attitudes and expectations to enhance self-awareness for greater effectiveness as a social work professional.	Field Instructor Evaluation

3	Integrate terminology from literary history into writing.	Research Paper
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Abilene New Course Application

You may delete the preceding instructional pages before submitting application.

Course ID (<i>Subject Code and Number</i>)	DET 380
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1. Systems and Catalog Information Complete each item.

A	Course Developer	Brian Burton
B	Course Instructor	Brian Burton
C	Course Title	Game Engines II
D	Course Abbreviation for Banner if title is more than 30 characters	
E		COBA - Business Administration ▾
F		SITC - School of Information Technology & C... ▾
G		3 ▾
G1		3 ▾
G2		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		Lecture (LEC) ▾ See Schedule Type definitions in the Reference section.
L		3 ▾
M		Standard ▾
N	Maximum Enrollment	28

O	Catalog Description (50 words or less)	Game Engines II continues the exploration of using game engines for game development and virtual production. In this course, we create a series of increasingly challenging projects culminating in a final project.
P	List any prerequisites (course/s, test scores, class standing, major, etc.)	DET 260 with a grade of 'C' or better
Q	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)	
R	If the course is cross-listed, specify the subject code and course number of the other course	
S	Does this course require any additional student course fees?	☐ No If yes, attach a completed course fee form .
T1	Will the course be offered in fall terms?	☐ No
T2	Will the course be offered in spring terms?	☒ Yes, odd years
T3	Will the course be offered in summer terms?	☐ No
U	First semester this course will be offered under new Course ID. <i>May not be earlier than the coming fall semester.</i>	Spring 2025
V	Is this course required for a program(s)?	☒ Yes If yes, attach a completed curriculum proposal to change the program(s).
W	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 If yes, provide rationale:

X	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>	Yes ▾ If yes, provide course ID, term, and enrollment: DET 340 (ST:Game Engines II), Spring 2023, enrollment 16
Y	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.</i>	

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.
- Game Engines II will be a required course for the Game Development track in Digital Entertainment Technology.**
- B. Justify the addition of this course to the current curriculum, explaining the gap it meets.
- Game Engines II builds on the content of DET 260 (Game Engines), utilizing game engine software and toolsets to address more advanced topics related to industry trends and expectations. GEII provides exposure to a second, industry-standard, game engine. In addition to building on previous content, students are introduced to critical concepts such as multiplayer game design, remote procedure calls, and virtual production.**

3. Course Design

- A. Audience and Course Goal
- Describe the intended audience, including prerequisite skills.
Digital Entertainment Technology majors and minors. Students must have completed DET 260 (Game Engines) with a C or higher.
 - State the overarching course goal(s) in performance terms.
The overarching goal of “Game Engines II” is to empower students to conceptualize, design, and publish interactive games or virtual productions, with a focus on creating immersive environments and understanding multiplayer game development. The course aims to enhance students’ ability to tailor games or environments to a specific audience, thereby expanding their practical application skills in game engine technology.
- B. Student Learning Outcomes and Measurements

Student Learning Outcome	Measurement
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1	Create immersive environments appropriate to game and/or virtual production needs.	Course project
2	Create an interactive game or virtual production from concept to publication.	Course project
3	Introduction to multiplayer game development concepts.	Course project
4	Create a game or environment appropriate for a specific audience.	Term project
5		

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**.

Blueprints Visual Scripting for Unreal Engine 5, 3rd Ed. by Romero & Sewell (2022)

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.

Updated 8/1/2023

ACU College Of Business Administration
Course Syllabus
Game Engines II (DET 380)
Section 1, Spring 2025



Instructor: Dr. Brian Burton
Assoc. Professor
Phone: 325-674-6989
Email: bgb07a@acu.edu

Office Hours: TR 12:00-3:00

Office: MBB 230
Classroom: MBB 315

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

ACU Mission

*"To create a distinctively Christian environment in which
excellent teaching, combined with scholarship,
promotes the intellectual, personal, and spiritual growth of business students,
and educates them for Christian service and leadership
throughout the world."*

COBA Mission

Course Description

Game Engines II. Game Engines II continues the exploration of using game engines for game development and virtual production. In this course, we use the Unreal Engine to create a series of increasingly challenging projects culminating in a final project. Prerequisite: DET 260 with a 'C' or higher.

Outline of Topics

Game Engines II introduces the Unreal Engine and its use in creating advanced game development and virtual production. Topics covered in the course include using visual scripting tools, lighting, VFX, building environments, creating and editing animated sequences, application of PBR textures, building a game for a genre, and an introduction to remote procedure calls for multiplayer game development.

Contribution of Course to Christian Service and Leadership

In this rapidly expanding culture of digital entertainment, there are nearly infinite ways to creatively express and share our Christian faith with the world whether professionally or personally. This class is designed to better equip students with the tools and skill sets needed to create richer more dynamic media content that will broaden the effective quality of their artistic endeavors. We will also learn how individuals leading Christ-centered lives can effectively use their talents and faith to be shining examples in this secular media industry.

Format

Course material will be delivered via standard lecture presentations with labs. Class material will consist of computer demonstrations and handouts, combined with projects, self-study exercises, videos, homework assignments, and informal review sessions.

Course Requirements

Students are required to complete and turn in homework assignments, complete class quizzes, and participate in possible group projects. Any recognizable or admitted attempt to use a min-max strategy in regard to coursework will result in being dropped from the class. University is not a zero-sum game. Meeting minimum requirements earns an 80%. Anything extra begins to tally on the additional points.

A final project is a course requirement. Failure to produce, present, and publish a completed project will result in failing the course.

Course Web Site

Class assignments, videos, handouts, and other instructions will be on Canvas.

Homework Assignments

Projects will be assigned regularly. Due dates will be posted on Canvas. We will have a group critique in class. Assignments are expected to be turned in on time, any late assignments will receive only partial or no credit at the instructor's discretion.

Final Project

Your final project will be the culmination of all you have learned over the past semester and should reflect that knowledge. A COMPLETE and FUNCTIONING final project is required to pass the course.

Publication of the project is required.

Class Participation

Just like in any professional setting, you must be prepared to participate in group activities and contribute to class discussions. You must be willing to give your honest and educated opinion while being considerate and conscientious toward others. I am conducting this class as if it is a professional working environment so I expect your full attention. Working on other subjects during studio time will result in being asked to leave and counted absent for the day. Repeated offenses will result in being dropped from the course (WF) or receiving a failing grade. I encourage questions and comments that are relevant to our topics of conversation and I am happy to facilitate a dialogue that is informative and insightful.

There will be a class participation grade based on your contributions to discussions and critiques. Each student is expected to respond and contribute appropriately.

Grade Composition

Your grade will be computed on the following basis (values are TENTATIVE):

Activity	Value	Completion or Due Date
Homework Assignments	600 (70%)	As Assigned
Final Project	200 (20%)	As Assigned
Class Participation	100 (10%)	

Grading System

Each activity (homework assignment, quiz, final exam) will be graded on the basis of 100%.

The grading system for the course is given in the following table.

Letter Grade	Semester Combined Average
A	90 or above
B	80 – 89.9
C	70 – 79.9
D	60 – 69.9
F	Below 60

Attendance Policy

Students in the School of IT & Computing are allowed to miss up to four (4) classes on a T/TH schedule without penalty. This applies to both excused and unexcused absences. Any absences beyond four classes may result in being dropped from the course. Late arrival beyond 5 minutes counts as an absence.

Academic Integrity

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/>.

Classroom Management

In order to maintain decorum and optimize the learning environment for all members of the class, certain classroom management policies must be adhered to:

- If you sleep or are engaged in other activities in class/lab you will be asked to leave and you will be counted absent.
- If you walk out of class/lab without returning, you will be counted absent (obviously, exceptions will be made if you become ill or have made a prior arrangement with the instructor).
- Disruptive behavior will not be tolerated. This includes playing games, writing an email, engaging in messaging, or similar activities during lab periods. If you disrupt the class, you will be asked to leave and will be counted absent.
- Please do not eat during class time. Eating can be extremely distracting in the learning environment.

Communications

If there is any pertinent information that was not given during class time it will be posted to Canvas, so please try to check this often. I can be reached via Discord (fastest) or email (slowest) if you have questions about the course.

Students with Disabilities

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/accessibility-statement/>. 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/>.

Text and Supplements

The textbook recommended for this course is:

Blueprints Visual Scripting for Unreal Engine 5, 3rd Ed. by Romero & Sewell (2022)

Rubrics

Environment Rubric	
<u>Criteria</u>	<u>Points</u>
Inspiration Image submitted	5
Used Landscape Mode	5
Used multiple textures for landscape	10
Kitbashed from Megascans, marketplace, or similar resource	10
Fly-through of environment submitted as mp4	10
Above and Beyond: Impress me!	10

Final Project	
<u>Criteria</u>	<u>Points</u>
Presentation of final project	50
It works (no bugs or special configuration required)	100
Portfolio worthy (includes link to portfolio)	100
Portfolio includes full development pipeline appropriate for industry standards	50



May 1, 2024

Dr. Brian Burton
School of Information Technology and Computing
Mabee Business Building (MBB) 230
(325) 674-6989

Re: Review of Game Engines II (DET 380)

Dear Dr. Burton,

Thank you for submitting Game Engines II (DET 380) to us for review. I have reviewed it based on the ACU Syllabus Guidelines. I found the syllabus to meet all aspects of the checklist.

Please note that this letter is intended as a reference, which will be read by the department chair and members of the council, 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 be of any help as you move forward.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott E. Hamm".

Dr. Scott E. Hamm,
Assistant Director, Adams Center

ABILENE CHRISTIAN UNIVERSITY

LIBRARY

MEMORANDUM

DATE: April 4, 2024
TO: Dr. John Homer
FROM: Mark McCallon, Associate Dean for Library Services
RE: Course Application – DET 380 – Game Engines II

After reviewing the course proposal and course syllabus, the library can adequately support the proposed course. Thank you for allowing us to review the course.