# ARCH 136: ADVANCED BUILDING INFORMATION MODELING FOR ARCHITECTURE

## In Workflow

- 1. DOD Committee Chair (estiokom@csus.edu)
- 2. DOD Chair (rpratt@csus.edu)
- 3. ALS College Committee Chair (irwin@csus.edu; j.gallegos@csus.edu)
- 4. ALS Dean (mwilson@csus.edu)
- Academic Services (catalog@csus.edu)
- 6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
- 7. Dean of Undergraduate (gardner@csus.edu)
- 8. Dean of Graduate (cnewsome@skymail.csus.edu)
- 9. Catalog Editor (catalog@csus.edu)
- 10. Registrar's Office (k.mcfarland@csus.edu)
- 11. PeopleSoft (PeopleSoft@csus.edu)

# **Approval Path**

- 1. Thu, 14 Sep 2023 17:18:39 GMT Mario Estioko (estiokom): Approved for DOD Committee Chair
- Thu, 14 Sep 2023 17:51:34 GMT Richard Pratt (rpratt): Approved for DOD Chair
- 3. Thu, 21 Sep 2023 19:26:08 GMT Jacqueline Irwin (irwin): Rollback to Initiator
- Mon, 25 Sep 2023 20:14:49 GMT Mario Estioko (estiokom): Approved for DOD Committee Chair
- 5. Mon, 25 Sep 2023 22:14:12 GMT Richard Pratt (rpratt): Approved for DOD Chair
- 6. Mon, 25 Sep 2023 22:17:30 GMT Jacqueline Irwin (irwin): Approved for ALS College Committee Chair
- Mon, 25 Sep 2023 22:20:28 GMT Melinda Wilson Ramey (mwilson): Approved for ALS Dean
- Mon, 30 Oct 2023 16:19:47 GMT Katie Hawke (katiedickson): Approved for Academic Services

## **New Course Proposal**

Date Submitted: Mon, 25 Sep 2023 18:32:36 GMT

Viewing: ARCH 136: Advanced Building Information Modeling for Architecture

Last edit: Mon, 25 Sep 2023 18:32:34 GMT Changes proposed by: Carolyn Gibbs (101014897)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Carolyn Gibbs	carolyng@csus.edu	9162783948

#### **Catalog Title:**

Advanced Building Information Modeling for Architecture

Class Schedule Title: Advanced BIM for Arch

Academic Group: (College)

ALS - Arts & Letters

**Academic Organization: (Department)** 

Design

Will this course be offered through the College of Continuing Education (CCE)?

No

### **Catalog Year Effective:**

Fall 2024 (2024/2025 Catalog)

Subject Area: (prefix) ARCH - Architecture

Catalog Number: (course number)

136

Course ID: (For administrative use only.)

**TBD** 

Units:

2

Is the only purpose of this change to update the term typically offered or the enforcement of existing requisites at registration?

In what term(s) will this course typically be offered?

Fall, Spring

Does this course require a room for its final exam?

No, final exam does not require a room

Does this course replace an existing experimental course?

No

This course complies with the credit hour policy:

Yes

#### Justification for course proposal:

This course is part of the Department of Design's new BFA in Architectural Studies major. The Form B for this new program will be submitted concurrently.

## Course Description: (Not to exceed 80 words and language should conform to catalog copy.)

Advanced techniques for designing in Building Information Modeling (BIM) environments, including conceptual modeling, design options, custom object creation, and energy modeling and analysis. Emphasis on creating construction drawings using Revit.

Are one or more field trips required with this course?

No

Fee Course?

No

Is this course designated as Service Learning?

No

Is this course designated as Curricular Community Engaged Learning?

No

Does this course require safety training?

Νo

Does this course require personal protective equipment (PPE)?

Νo

Does this course have prerequisites?

Yes

Prerequisite:

ARCH 36

**Prerequisites Enforced at Registration?** 

Yes

Does this course have corequisites?

No

Graded:

Letter

Approval required for enrollment?

No Approval Required

Course Component(s) and Classification(s):

Activity

**Activity Classification** 

CS#07 - Fine Arts and Science Activity (K-factor=1.3 WTU per unit)

**Activity Units** 

2

Is this a paired course?

Nο

Is this course crosslisted?

No

Can this course be repeated for credit?

No

Can the course be taken for credit more than once during the same term?

No

## **Description of the Expected Learning Outcomes and Assessment Strategies:**

List the Expected Learning Outcomes and their accompanying Assessment Strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers). Click the plus sign to add a new row.

	Expected Learning Outcome	Assessment Strategies
1	Explore architectural massing concepts using Revit's 3D conceptual tools.	Activities and assignments
2	Construct industry-standard architectural construction drawings and schedules	Activities and assignments
3	Apply BIM project setup, modeling, and presentation workflows	Activities and assignments
4	Analyze design strategies using energy modeling and analysis tools	Activities and assignments
5	Create complex building designs using advanced parametric modeling tools	Activities and assignments
6	Design custom parametric families	Activities and assignments

## Attach a list of the required/recommended course readings and activities:

ARCH 136 \_Syllabus\_Advanced Building Information Modeling.pdf

For whom is this course being developed?

Majors in the Dept

Is this course required in a degree program (major, minor, graduate degree, certificate?)

Yes

Has a corresponding Program Change been submitted to Workflow?

Yes

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Identify the program(s) in which this course is required:

### **Programs:**

**BFA** in Architecture Studies

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

Νo

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

## **University Learning Goals**

#### **Undergraduate Learning Goals:**

Competence in the disciplines

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

## **GE Course and GE Goal(s)**

Is this a General Education (GE) course or is it being considered for GE?

No

#### **Reviewer Comments:**

Michelle Felten (mfelten) (Thu, 21 Sep 2023 18:21:24 GMT): Hello Carolyn: For ARCH 136, we have voted to approve pending the minor edit of starting ELO#1 with "Explore" to maintain consistency in the ELO formatting.

Jacqueline Irwin (irwin) (Thu, 21 Sep 2023 19:26:08 GMT): Rollback: Dear Carolyn, Please see suggestions for revision from Michelle. Once your proposal has been revised as per their recommendations, please resubmit and send me an email so I know that your proposal is ready to move forward. Thank you, Jacqueline, ALS Curriculum Chair

Key: 14974