# Course Syllabus

Course Number:	EID 319
Course Title:	EID 319: Advanced Computer Aided Design
Term:	Fall 2022
Course Credits:	3
Prerequisites:	EID 202, EID 217, or consent of instructor
Class Meeting Days:	Online, On-Demand Class Sessions
Class Meeting Hours:	At Your Own Discretion
Class Location:	N/A
Office Hours:	Thursdays 1pm - 2pm By Appointment Only (Subject to Change)
Instructor Name:	Chretien Macutay, D. Arch., AIA
Email:	chretien.macutay@chaminade.edu
Phone:	808.372.3661

### **Course Description**

This course provides skill development for digital construction documentation using **Revit** and **Enscape** software. Students explore 2-dimensional construction documentation (e.g. floor plans, elevations, lighting, detailing and schedules); organization of information; as well as 3-dimensional drawing and rendering techniques.

### Class Format

Each class will be a pre-recorded session that will consist of demonstrations & exercises to allow students to grow confidence and proficiency in using the software. As this is an online, on-demand course, students are expected to maintain their own self-directed schedule in keeping up with the course content, as well as meeting the deadlines for Exercises, Projects, and Quizzes. Class sessions will be posted online on our Canvas site.

Students are welcome and encouraged to email the instructor any questions they might have throughout the semester (please note that I will try to respond within a day or two, but weekend emails may not be seen until the following week). Regular instructor "Office Hours" will be available (by appointment only) for students who would like to schedule a one-to-one or group work session. Regular communication & announcements with the class will be conducted primarily through Chaminade's Canvas system.

#### Course Learning Outcomes

By the end of this course, students should be able to:

- Demonstrate software proficiency in the use of Revit as a means to produce 2-dimensional & 3-dimensional architectural/interior design documents.
- Demonstrate a fundamental understanding of the concept of a Building Information Model (BIM).
- Organize information within the context of a construction documents set.
- Demonstrate an understanding of how to provide accurate representation of specified finishes, fixtures and equipment.
- Demonstrate a fundamental understanding of how to navigate their design model(s), as well as leverage real-time rendering software to communicate designed spaces.

## Assessment

Class Participation & Exercises	10 %
Project #1	25 %
Project #2	25 %
Project #3	25 %
Quizzes (2)	15 %
Total	100 %

Note: Assignments handed in late will not be accepted unless arranged in advance with the instructor; 5 points will be deducted from the total number of points for each day the assignment is late beyond the prescribed due date.

## **Evaluation Criteria**

- Understanding of the course materials
- Thoroughness in exercises & assignments
- Technical proficiency
- Professional demeanor
- Timely submission of required tasks

#### **Required Learning Tools & Materials**

- Laptop or Desktop PC with mouse (please ensure your PC meets the software system requirements)
- Autodesk Revit 2022 software installed
- Enscape software installed (version 3.2 or newer)

I have read, understand, and agree to the terms of the Course Syllabus.

Student Signature: \_\_\_\_\_

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# Proposed Schedule\* (Abbreviated)

\*Schedule subject to change at any time

Week 1	(Week of Aug 22)	<u>(Class 1) – Syllabus Review, Introduction to Revit</u>
		(Class 2) – Project Browser, Properties, Views, Navigation, Walls
Week 2	(Week of Aug 29)	( <u>Class 3) – Levels, Grids, Floors, Ceilings, Openings</u>
		<u>(Class 4) – Doors, Windows, Stairs, Roofs; Start Project 1</u>
Week 3	(Week of Sep 5)	Assuming No Class for Labor Day Holiday
		(Class 5) – Dimensions, Annotations, Rooms, Areas; Continue Project 1
Week 4	(Week of Sep 12)	(Class 6) – Importing Families, Components; Continue Project 1
		(Class 7) – Color Schemes, Visibility Controls; Continue Project 1
Week 5	(Week of Sep 19)	(Class 8) – Sheets, Printing, Exporting; Continue Project 1
		<u>(Class 9) – Recap; Submit Project 1 by End-of-Week (EOW)</u>
Week 6	(Week of Sep 26)	<u>(Class 10) – Massing; Start Project 2</u>
		<u>(Class 11) – Groups; Continue Project 2</u>
Week 7	(Week of Oct 3)	<u>(Class 12) – Schedules; Continue Project 2</u>
		(Class 13) – Detailing; Continue Project 2, Quiz #1 Due by EOW
Week 8	(Week of Oct 10)	Assuming No Class for Discover's Day Holiday
		(Class 14) - Introduction to Enscape; Continue Project 2
Week 9	(Week of Oct 17)	<u>(Class 15) - Cameras, 3D Views; Continue Project 2</u>
		<u>(Class 16) - Materials; Continue Project 2</u>
Week 10	(Week of Oct 24)	<u>(Class 17) - Design Options; Continue Project 2</u>
		<u>(Class 18) - Recap; Submit Project 2 by EOW</u>
Week 11	(Week of Oct 31)	(Class 19) - Working with Other Files; Start Project 3
		(Class 20) - Phases, Revisions; Continue Project 3
Week 12	(Week of Nov 7)	<u>(Class 21) - Curtain Walls, Railings; Continue Project 3</u>
		(Class 22) - More on Walls; Continue Project 3
Week 13	(Week of Nov 14)	(Class 23) - More on Families; Continue Project 3
		<u>(Class 24) - More on Massing; Continue Project 3</u>

Week 14	(Week of Nov 21)	<u>(Class 25) - Enscape; Continue Project 3</u>
		(Class 26) - Enscape; Submit Project 3 by EOW
Week 15	(Week of Nov 28)	<u>(Class 27) - Recap</u>
		(Class 28) - Recap, Quiz #2 Due by EOW
Week 16	(Week of Dec 5)	<u>Finals Week - No Class</u>