

Course Information

Number and title: Arch 490 - 02 -Artificial Intelligence in Arch

Professor info: **Alphonso Peluso**
E-Mail: peluso@iit.edu

Prerequisite(s): DC2 or permission from the department

Required Text and Materials: All tutorials for in class learning will be provided on the portal

Tutorials and Class Assignments Location: <http://alphonsofeluso.com> (or other)

Class Schedule: See link above

Course description: The AI Artificial Intelligence in Architecture course is designed to equip students with a comprehensive understanding of the applications and implications of artificial intelligence in the field of architecture. This course explores how AI technologies can enhance and revolutionize architectural design, planning, and construction processes. Throughout the course, students will delve into the fundamental concepts and theories underlying artificial intelligence, machine learning, and deep learning. They will examine various AI algorithms, techniques, and tools that can be employed in architectural practice. Students will also gain hands-on experience with state-of-the-art AI software and platforms used in the architecture industry.

Course goals: Students will work on weekly themes to generate images through an iterative process. For the midterm and final students will submit deliverables for a competition brief or a brief that they develop themselves.

Software: MidJourney
Rhino
Stable Diffusion
Control Net
Adobe Premiere
Runway ML

Grading: Each class students will submit completed class assignment(s) showing their progress and understanding of basic concepts. Final grade is based on the four percentages below:

10% for attendance
(attendance is mandatory, signing in for someone and/or 3 unexcused absences will result in a failing grade)

20% for Homework assignments

30% for Midterm

40% for the Final

Please note: attendance, completion and submission of all course work on time is the minimum requirement and does not mean that you will receive an A grade. All grades are subject to the grade judging criteria below:

Grades are determined by judging 4 different categories:

Legibility - Make sure that your assignments are clear and easy to read. Use spell check (all software apps have it). Your shared folder should be neat and organized with assignment #'s labeled **Firstname_Lastname_A0#**.

Composition - In addition to being legible you should apply all the concepts of composition that you have previously learned. Some suggestions including but not limited to are: images should tell a story. Images should create a sense of drama. Assignments should include title and drawing names, all text should be placed with good layout & scale.

Style - This is an expansion of Composition. Create your own style. Some style elements including but not limited to are: image style, lighting, camera angles, material representation, font color, font type, background color, title bar and rendering style

Innovation - Expand upon the skill sets taught in the course and apply them to the assignments. Research additional learning resources found on the Internet and in Libraries. Create your own way to apply the software tools and concepts discussed in the course.

Students with Disabilities Statement:

Americans with Disabilities Act (ADA) Policy Statement

Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must obtain a letter of accommodation from the Center for Disability Resources. The Center for Disability Resources (CDR) is located in 3424 S. State St., room 1C3-2 (on the first floor), telephone: 312.567.5744 or disabilities@iit.edu

Class Schedule

Week One:
January 09

Intro – Subscribe to MidJourney
How to set up a discord server for MJ
Bauhaus exercise

Week Two:
January 16

MJ Prompt Weights _ Figure Ground Studies

Week Three:
January 23

MJ Image Prompts _ Light Studies

Week Four:
January 30

MJ Aspect Ratios _ Film Types

Week Five:
February 06

Reverse story telling

Week Six:
February 13

Work in Class

Week Seven:
February 20

Work in Class

Week Eight:
February 27

Midterm Presentation

Week Nine:
March 05

MJ Zoom Out Features

Spring Break:
March 12

March 11 - 16

Week Ten:
March 19

MJ Pan Features

Week Eleven:
March 26

Stable Diffusion 1

Week Twelve:
April 02

Stable Diffusion 2

Week Thirteen:
April 09

Runway ML

Week Fourteen:
April 16

Work in Class

Week Fifteen:
April 23

Work in Class

Finals Week:
April 29

FINAL PRESENTATION

*note: course syllabus & schedule are subject to change