

Drone Horizons: Designing a Drone Port in Chicago for travel in the year 2100

ARCH 571 | Design: Detail and Architectonics | M/W 1:00 to 5:50

A Research-Design Graduate Studio

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In partnership with Corgan | Aviation Planning Group

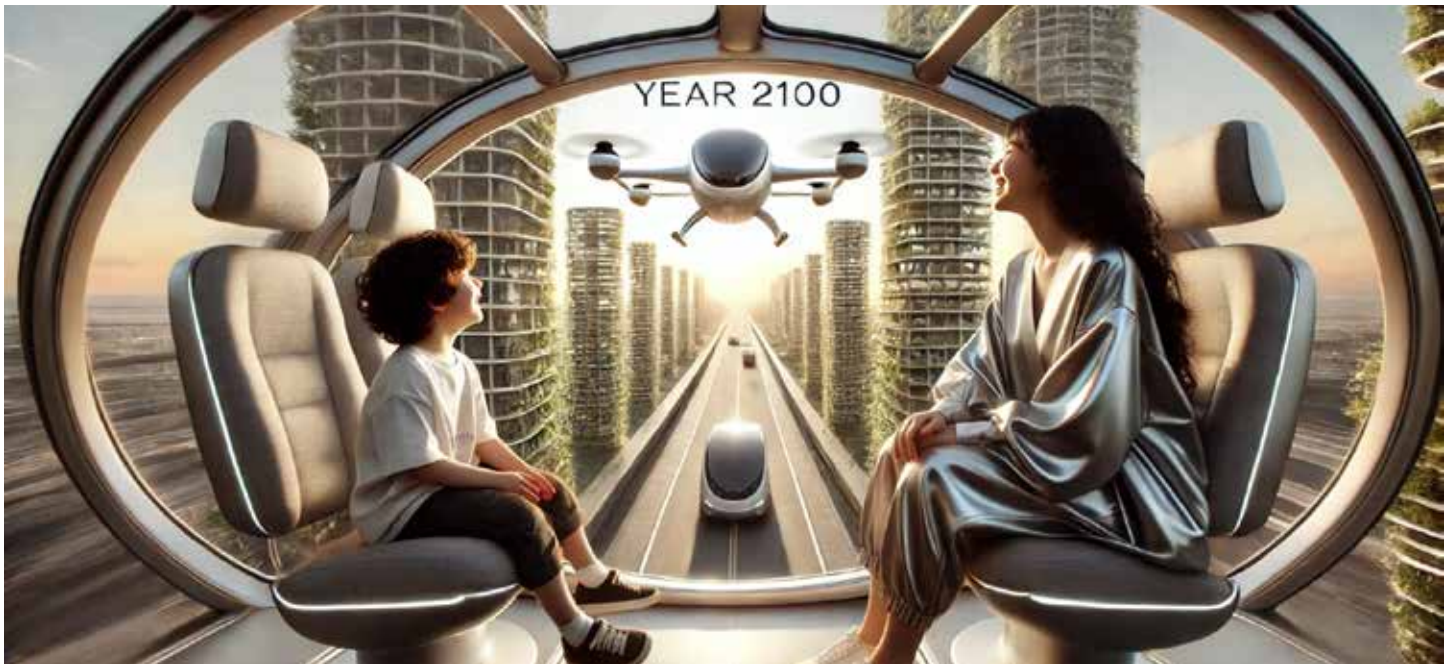


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Course Overview

With the emergence of distributed and autonomous mobility systems such as driverless Uber cars and drone taxis, transportation is on the verge of revolution. This studio explores the future of architecture and transportation in pursuit of innovative design. The students are challenged to envision a drone port in Chicago in year 2100. They are encouraged to utilize forecasts for environmental conditions, modes of travel, potential destinations, and other data to develop their design.

The studio comprises of two projects. The first short project focuses on speculating on the future of travel in year 2100 considering climate change, technological advances, security implications, and personal and social preferences. It involves understanding drones for moving passengers by studying the vertical takeoff and landing (VTOL) mechanism, drone dimensions and weight, passenger capacity, and range of travel, etc. It also involves learning to use computational and parametric design methods and plugins for creating complex and performative geometries. The outcome of the first project includes designing landing pads for drones. The second project will be completed in teams of two or three and involves designing a drone port in Chicago.

This studio is being offered in collaboration with Corgan Architectural firm. Corgan is a leading architecture and design firm which is consistently ranked as one of the top 5 architecture firms in the United States. They have expert groups in multiple sectors, namely Aviation Planning. Experts from the Aviation Planning group will be giving talks and lectures to the studio, participate in pin ups and reviews, and engage in project development.

Any Questions? email me at nemami@illinois.edu