Two high-speed rail corridors are currently under construction/study in Illinois. The first, under construction, will connect Chicago to St Louis through Bloomington with trains traveling 110 mph. The second will connect Chicago through Champaign to Indianapolis and St. Louis with 220 mph trains, cutting travel times from Champaign to Chicago to 1 hr. This second line will open many new options for commuters, introduce new commute patterns and have a transformative effect on the area surrounding the Chicago Station. For example it will be possible to commute to Champaign for classes at the University.

This studio will explore the potential transformative effects of the high-speed rail station in Chicago. The studio will envision a multi-modal High Speed Rail (HSR) Station that will be the hub of the Midwest high-speed rail network currently under study by the Illinois Department of Transportation. The project is envisioned as serving the transport needs of the Midwest high-speed network for the next 50 years. Our focus will be on passenger experience and movement and the integration of the terminus with the existing urban fabric of the city.

Our site for the project is located on the west side of the Chicago loop, bounded on the east by the Chicago River, the west by Canal Street, the south by Washington Street, and the north by Lake Street.

This studio will be coordinated with the high-rise studio being conducted concurrently by Prof. Armstrong.

There will be some initial individual work on rail precedents and team based urban analyses with Prof. Armstrong’s studio. Students will then work in teams of two to develop a proposal for the HSR Station. Each team will be paired with a team from Prof. Armstrong’s studio to develop a cohesive link between the HSR station and the adjacent high-rise.

We will share an existing site model.

Using this project as our investigative vehicle we will investigate new digital design and integration workflows that are emerging in the AEC industries and that will redefine project delivery. In particular we will be working to develop a complete digital workflow from ideation to integrated solution using digital sketching environments (WACOM Cintiq Hardware and Autodesk sketchbook pro) as well as Autodesk Labs’ Project Vasari. We will also have access to a large format touch-screen interface as part of a larger research project on new technologies in the studio.

**Semester Exercises**

Exercise 1 – Urban Analysis

Exercise 2 – Rail Terminal Precedents

Exercise 3 – Structure as Architecture

Exercise 4 – HSR Station