Becoming Digital:

How Tech Shapes The Built Environment

ARCH 411 / ARCH 509 / UT 411 / DIGITAL 411*
Taubman College of Architecture + Urban Planning
Winter 2026

Tuesdays and Thursdays 10:00am-11:30am, Online/Remote

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Becoming Digital serves as an introduction to the impacts of digital technologies on our built environment and the power inequities they often entangle.

Technologies from 'smart' objects to 'smart' cities are reshaping our world and our selves at an accelerated pace — radically affecting our homes, workplaces, streets, and neighborhoods. Often, the effects of these transformations are hidden from clear view, occurring in the black box of the algorithm or the board room. This invisibility leads to the misperception that the data and algorithms that underpin digital technologies are neutral or objective; however, it is quite the opposite, as they are entangled with the same systems of oppression and discrimination that disproportionately harm BIPOC communities, those living with low income, and the most vulnerable among us in other aspects of society.

This course introduces students to the histories and principles that structure digital technologies and the ethical dilemmas they often pose, and endeavors to more deeply understand the benefits and risks of the digital for the built environment. Students will gain digital literacy – characterized by a broad understanding of how technology works, its inherent biases and power structures, and its effect on people – with a commitment to a more healthful, equitable, and just world, strengthened by design.

This course will be held synchronously online. Course components include lectures, reading discussions, and small-group workshops.

Example topics include **Generative AI, Software, the Internet of Things, Automation, Environtmental Costs of the Digital, and "Smart" Cities**.

*This course is cross-listed between Architecture, Urban Technology, and the Digital Studies Institute and is open to both undergraduate and graduate students from all departments and programs.