

Architecture After the Algorithm: Computation, Fabrication, Intelligence

ARCH 593 | Special Problems in Detail and Fabrication | 3 CH

Illinois School of Architecture | Fall 2026 | Thursdays 2:00 PM to 4:50 PM

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Office hours: contact instructor to set up a time.



The Striatum Bridge (Block Research Group + Zaha Hadid Architects, Venice 2021)

Course overview

This seminar traces the intellectual and technical arc of computational design in architecture — from the geometric logics of parametric modeling and digital fabrication to the emerging challenges posed by artificial intelligence. Each week pairs a primary reading with a recorded lecture by a leading figure in the field, grounding hands-on computational work in the broader cultural, theoretical, and critical debates that shape contemporary practice. Students will engage thinkers ranging from Patrik Schumacher and Mario Carpo to Neil Leach and Molly Wright Steenson, encountering both enthusiastic and skeptical accounts of where computation is taking the discipline.

The seminar is organized in three movements: computation and parametric design, performance and fabrication, and artificial intelligence. Complementing the weekly readings and discussions, students are provided curated links to Rhino and Grasshopper tutorial recordings to work through independently, ensuring that theoretical inquiry stays tethered to material and geometric practice. The course asks not only *how* architects design with computational tools, but *what it means* to do so — and what is at stake as those tools grow more autonomous. No prior experience with Grasshopper is required.

This seminar is designed to complement the graduate studio offered in the same semester. Priority enrollment will be given to students enrolled in the studio, with any remaining seats made available to other interested students.