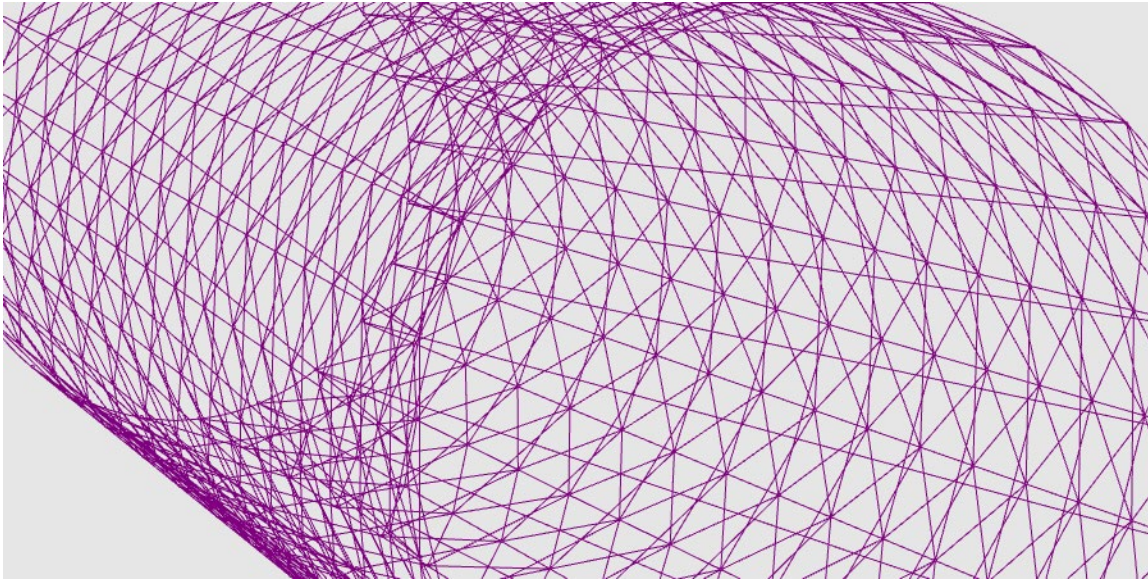


# CARNEGIE MELLON —ARCHITECTURE



*Speculative software project (Konektor) by Vernelle A. A. Noel*

## **62-275: Fundamentals of Computational Design**

**Units: 9**

**Instructor: Vernelle A. A. Noel**

As analog mechanisms; as metaphors; as bodily extensions or prosthetics; as material systems; as building envelopes; as partners — or ‘slaves’? — of humans. This course takes computers outside the box and outlines a journey of discovery revealing computation as the connective tissue encompassing multiple facets of contemporary architectural practice and experience. Addressing conceptual and practical aspects of the relationship between computation and design, the course explores the fundamentals of generative and rule-based systems for designing and making, responsiveness, along with basic approaches to creative data processing, representation and materialization.

The course offers a holistic view of computation and explores different roles computing plays in the design of our built environment. Organized in two-week modules, the course explores six themes, each combining historical insight, architectural examples and hands-on design exploration.

