



RowanUniversity

ADDITIVE AND ROBOTIC CONSTRUCTION  
LABORATORY (ARC-LAB)

# Concrete Additive Construction (3D-Printing)

**Our goal** is to get familiar with operation of the large-scale concrete 3D-Printers and envision and print next generation of structures that are (1) topologically optimized, (2) submerged structure, and (3) bridge elements (**4 CEE, 1 ME, 1 ECE students**)

**Advisor: Dr. Islam Mantawy**

**Graduate Students: Anthony Mackin, Jenna Migliorino, and Aly Ahmed**

Over the next semester, the students will:

- Envision new structures enabled by additive construction
- Design and Analyze the envisioned structures
- Additively construct the envisioned structure
- Ensure structural capacity and functionality of the envisioned structures

