48-215: Materials & Assemblies  
Units: 9  
Instructor: Gerard Damiani

This course introduces and examines the fundamentals between design intent and construction materials, the science of materials (performance) and their assemblies. Learning how materials and techniques inform spatial and form making decisions will be a central theme for the semester. Lectures and discussions will focus on the meaning, aesthetics and techniques related to the use of materials and the process of construction. A basic understanding of essential, well-known systems of building construction will be our baseline. Discussions and case studies of contemporary systems that extend, experiment with and question these known systems will introduce you to the great depth to which this basic knowledge can lead you. Joint assignments with the design studio will provide you with an opportunity for an in-depth exploration of these fundamentals of construction through a direct application and synthesis of this new knowledge to your studio project.

Prerequisites: A working understanding of freehand drawing, AutoCAD, Rhino, Adobe Illustrator and Photoshop, and the successful completion of 48-105: Architectural Design Studio: Foundation II.