LEARNING OBJECTIVES

Students will:

**Concepts:**
- Identify the components of concrete, how it is made, and the history and benefits of using it as a building material
- Review the concepts of tension and compression and how they relate to the behavior of concrete beams
- Learn why and how aggregate type and size, and component ratios affects concrete beam behavior.

**Scientific Method and Tools:**
- Form and test a hypothesis on the failure mode of concrete beams
- Observe the behavior of concrete beams

**Communication and Collaboration Skills:**
- Work effectively in a small group.
- Present group work effectively to others
- Constructively critique one’s own ideas and those of other learners
- Present their work in an organized and clear manner.