

ARE 482 : Operation Analysis in Building Construction

The course provides students with an introduction to how to approach a construction project covering site set up, planning including the provision of different types of construction equipment and their application, equipment economics, productivity measures, probability theory and statistics, and performance improvement. This task will be linked to the master schedule and the financial planning too . The outcome will be a comprehensive plan for driving projects through completion based on scientific approach and optimum planning. The course primarily focuses on modeling and simulation of field operations using discrete event simulation, including the use of specialized software. Activity cycle diagrams will be used extensively to describe processes and their elements, activities, and resources. Verification and validation of simulation models will be discussed. Analytical skills gained from this course will allow students to better understand and design construction operations. Students will have the opportunity to meet construction managers and visit construction projects to get hands on experience.

Credits 3

Lab Hours 0

Lecture Hours 3

Tutoring Hours 0

Prerequisite Courses

ARE 355

Corequisites

none