

# Arch 594-LCC: Building Life Cycle Cost & Financial Feasibility Analysis

Semester Given: Fall 2024  
Instructor: Mohamed Boubekri, Ph.D.  
Time: Tuesday 2:00-4:30  
Credits: 3 hours

LCCA is a process of evaluating the economic performance of a building as an economic enterprise over its entire life. Sometimes known as “whole cost accounting” or “total cost of ownership,” LCCA balances initial monetary investment with the long-term expense of owning and operating the building.

LCCA is based upon the assumptions that multiple building design options can meet programmatic needs and achieve acceptable performance, and that these options have differing initial costs, operating costs, maintenance costs, and possibly different life cycles. In Arch 594-LCC students will learn the mechanics of how to make a full life cycle analysis of a given design alternative as well as how to estimate the return on a building investment solution.

Using a real-life project, students will learn how to estimate the initial cost using the RS-Means Building cost estimator, then how to assess the economic feasibility of recurring costs of this project such as energy, item replacement, maintenance costs as well as potential income from this building given a real economic context.