

Technical Environmental Systems

Final Project:

In this project, geometry of a commercial building should be first introduced in SketchUp and the other characteristics of the building should be then defined employing OpenStudio. The latter software should next be used to calculate the yearly heating and cooling consumption of the building for a base case. Next, a parametric study, should be conducted in order to investigate the effect of changing the position and wall characteristics on the building's yearly energy consumption. Accordingly, the simulation should be performed for three different cities and three different walls, and the corresponding obtained yearly consumptions should be compared with the ones of the base case.