



Appendix A – Breadth Studies:



Breadth Topics:

The following topics involve a more detailed analysis from the disciplines within the Architectural engineering major. Each topic mentioned in this section relates to an analysis mentioned in the previous analysis, which are identified accordingly.

Structural Analysis (Analysis #3):

In an attempt to redesign the current architectural precast panels. This analysis will include redesigning the 20 foot parapet walls, with collaboration with the architect. Different size beams and columns may arise through the structural calculations that will be performed.

Electrical/Lighting Analysis (Analysis #1):

Looking into the integrating solar roofing, the PV panels will reduce the energy consumption of the Data Center. This breadth will explore the amount of energy that the PV panels will bring and determine how the energy is distributed into the building electrical systems. Furthermore, a buy back period will be determined.