



## BREADTH TOPICS

The following topics involve a more detailed analysis in distinct technical disciplines within the major. Each topic contributes to the previously mentioned analyses, which are identified accordingly.

### *ACOUSTIC BREADTH: Contributes to both Technical Analysis #3*

An acoustical analysis of the temporary chillers will be performed. The temporary chillers are located outside in the parking lot of the job site. These chillers can be very loud and disruptive to the construction workers and people working around the job site. The current sound output will be looked at and then a method will be chosen that will reduce the sound that comes from the temporary chillers. Once a method is chosen, calculations will be made to determine the reduction of sound. The goal is to bring the targeted wavelength to reduce the noise for workers during construction or people working nearby.

### *ELECTRICAL BREADTH: Contributes to Technical Analysis #2*

A detailed analysis of the potential energy production that the Office Building will generate with the addition of the PV panels on the green roof will be carried out. Hand calculations using square foot area and acquired energy production data will be the main source of the breadth. Once this information is obtained, it will be used to calculate life cycle costs and potential savings for the building.