

# Ae 4342 – Lab 5

## **Design Justification**

4 ISIS 2U Solar Panels were used on the CubeSat, one on each face. Each of them deploys on the bottom portion of the CubeSat, away from the antenna, so that it can receive a maximum amount of power while transmitting data back to earth, with one side facing the sun and the antennae side facing Earth. The Pumpkin Linear EPS Module was placed furthest from the antenna as to avoid Electromagnetic Interference throughout the use of the CubeSat. The GP SRM 1 GPS Receiver Module was placed directly above the EPS module as to provide the most space for payload above these components. Similarly, the BCT XACT-50 was placed in the top half of the CubeSat to avoid removing parts of the structure which may compromise the satellite's structural integrity and leave enough space in the payload bay.





