Students in the ORE 783 Capstone class have been working on the Apra Harbor Improvement Project. Apra Harbor is an economic and military hub located on the west coast of Guam. The current configuration of Apra Harbor does not provide adequate wave protection to the Naval operations at Kilo Wharf. The main objectives of this project are: (1) to assess the technical and economic feasibility of modifying the entrance to Apra Harbor to eliminate operational downtime at Kilo Wharf, and (2) to assess the feasibility of integrating a wave energy converter into the new breakwater structure to harvest clean energy.

Last week the students discussed the first phase of the project which included a literature review, site characterization, defining design parameters, and conceptual design. This week the class will discuss the preliminary design, construction sequencing, cost estimation, environmental monitoring plan, and environmental permitting.