E 100 - Special Topics in EAS: Deep Space Operations

3 units

Instructor: Ehlmann

Graded pass/fail

Spacecraft operating outside low-Earth and geostationary orbits have unique considerations when conducting operations. This course covers deep space communication, navigation, propulsion, timing, sequence generation and validation, science observation planning, telemetry monitoring, faults and recovery, and flight procedures. This course is a multi-institutional course and will be taught remotely with a series of lectures from institutions with deep space experience. Each student is expected to prepare weekly a short response to the week's ops scenario and participate in weekly discussions of the scenarios.