

Space Settlement Design Competition

Who:

4 select students who are 9th-12th graders in advanced science classes who wish to pursue a science, technology, engineering, or mathematics (STEM) career. These students will be selected based on the science department review of the applicant's application. Erin Yoder will travel as a chaperone.

What and Why:

Space Settlement Design Competition (SSDC) is an engineering industry simulation. In SSDC, students form and operate an engineering company. This company is organized according to a system similar to that of a real company. Every participant has a significant role to fulfill. The competition is designed to provide participants with experiences similar to those encountered by real engineers developing ideas related to a request for proposal from a potential customer. The competition teaches students to communicate effectively with others, evaluate solutions, cope with stress, solve problems with unpredictable solutions, work as a team, manage time, organize a huge task, apply STEM skills, ask questions, assess their solution, evaluate economic costs, and evaluate quality of life on the settlement. Students will present their plan to NASA and Aerospace engineers and then will be grilled with questions. Handling the questions and providing clear and concise answers is an important skill in the engineering world. The team that is selected by the panel of judges (aerospace engineers) as having produced the best proposal has the responsibility to select up to 12 of its members to attend the International Space Settlement Design Competition conducted in Florida in late July. At the Internationals the JSC team will be combined with at least two other teams to form a new company to compete by again completing a proposal in answer to a Request for Proposal from the Foundation Society. Past teams participating in the International Space Settlement Design Competition have come from across the United States including Florida, Kentucky, New Jersey, Colorado, and California. Teams also have come from Canada; Australia; India; Pakistan; Romania; the United Kingdom; and Uruguay. The Internationals are a truly unique event.

NEW starting in 2023

Industry Simulation Education (InSimEd -- <https://www.insimeducation.com/>) is a 5-person 501c3 that is now organizing the event. Northwest AEA is providing support. All registration fees and program details are now handled by InSimEd. Tom McGuire (NWAEA) is the local contact for questions and will be serving as co-coordinator for the event along with Hayley Spears (NASA engineer).

Itinerary and Cost

Friday March 7, 2025	Depart Pella in school van, college visit @SDSU (Mars Rover lab), spend the night at hotel
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Saturday March 8, 2025	Competition begins
Sunday March 9, 2025	Competition ends and travel back to Pella
Costs	<ul style="list-style-type: none">● Competition registration \$175/ person● Travel + hotel ~600.00 (3 rooms- 2 rooms for students 1 room for teacher) \$<ul style="list-style-type: none">○ TOTAL = \$ ~300/person