

The Canadian Satellite Design Challenge: Building Future Space Capability in Canada



Presentation to the
1st Symposium on Space Educational Activities
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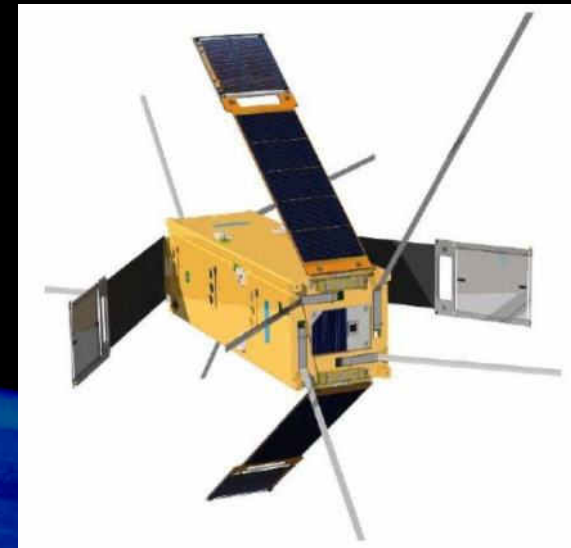
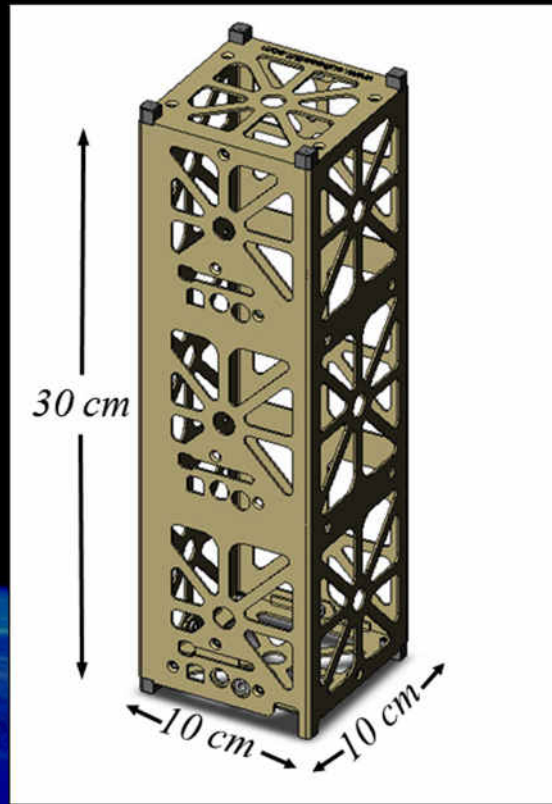
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What is the Canadian Satellite Design Challenge?

The Canadian Satellite Design Challenge (CSDC) is a Canada-wide competition for teams of university students (undergraduate and graduate) to design and build a 3U cubesat, with the goal of launching the winning satellite.



CSDC Key Benefits to Students

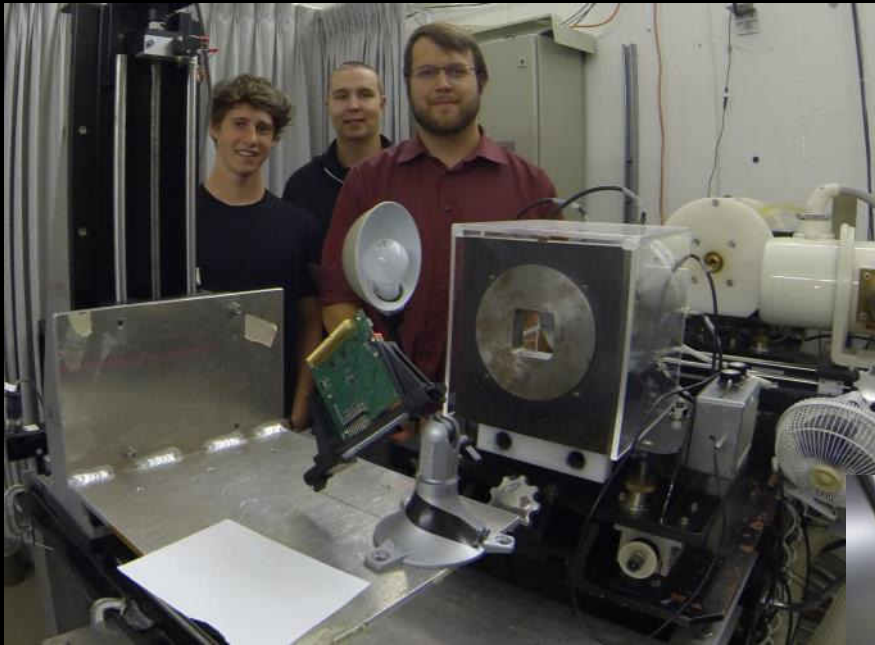
- It's more like the real world!
 - Teams are necessarily multi-disciplinary
 - Competition proceeds like a real space mission
 - Customer/Contractor, schedule & milestones, documentation
 - Comprehensive Critical Design Review
- Hands-on learning/mentoring opportunities
 - Professional visits to space companies
 - Clean-room and radiation testing workshops
 - Vibration testing at Canada's national spacecraft test facility
- Educational Outreach
 - Inspire younger students who will follow them



Mentorship & Hands-on Experience



Mentorship & Hands-on Experience



Workshops at Canadian Space Companies

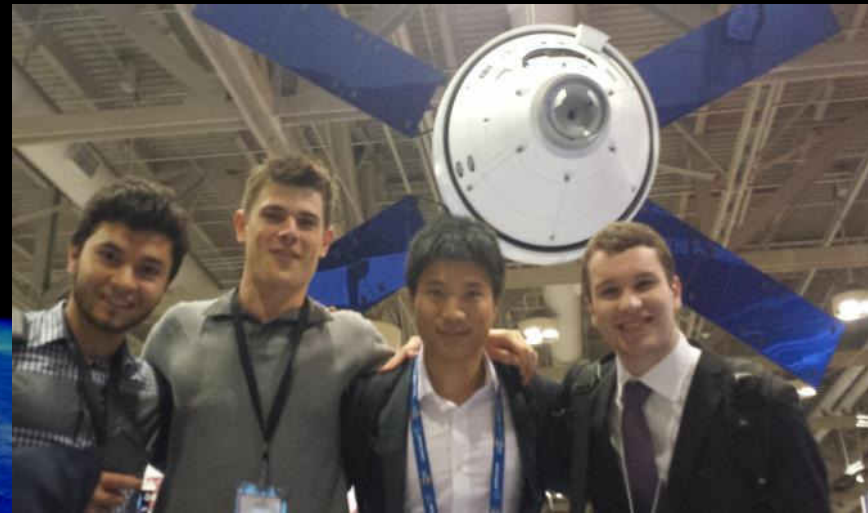


Spacecraft Environmental Testing



International Experience & Opportunities

CSDC has generated >40 presentations for Canadian & International Conferences.



CSDC Participants at ISU



Educational Outreach

- Inspire pre-university students to pursue education & careers in science & engineering.
- Highlight the benefits and importance of satellites and space to Canada.
- Help CSDC participants become better presenters!



Summary from 2½ CSDC Offerings:

- The CSDC has given students valuable educational content through “hands-on” experience, and knowledge transfer through mentorship, collaboration, and reviews.
 - Makes more knowledgeable scientists, engineers, and managers for entry-level positions in Canada’s space marketplace
 - A lack of prior spacecraft mission experience is NOT a barrier to successful participation.
 - Students’ incredible energy, ability, and dedication make lofty goals achievable.
 - CSDC participants have world-class abilities!
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Thank You!

