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

Presentation to the 1st Symposium on Space Educational Activities
Dec., 2015

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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!
Thank You!