



University of Victoria Satellite Design Team

Executive Summary 2016

UVic ECOSat (Enhanced Communications and Observation Satellite) is a student-run group which has competed in the **Canadian Satellite Design Challenge** (CSDC) hosted by Geocentrix Technologies for the past four years. The challenge is supported by prominent market partners Boeing, MDA Space, Advanced Robotics, and UrtheCast. Every two years, the CSDC invites 12 universities from across Canada to compete to design a cube satellite and its mission. The competition promotes the development of small satellite infrastructure - the satellite must measure 10x10x34 cm with a mass less than 4 kg - as well as knowledge and research into the practical and commercial applications of nanosatellite technologies in Canada.

UVic ECOSat is comprised of a diverse group of graduate and undergraduate students who are passionate about space technology and technological innovation in general. **In 2014, ECOSat-II proudly achieved first place** in round 2 of the CSDC, securing a **launch into Earth's orbit**. The group is now having great success in round 3, developing a new satellite that will hopefully also join ECOSat-II in orbit one day.

Rather than purchasing existing hardware and adopting third party software, **ECOSat designs systems in-house**. Command and data handling systems, mechanical construction, payload development and power system have been designed and developed primarily in-house at the University of Victoria, further distinguishing the project's achievements. As well as working on the satellite, the group engages in multitudes of presentations and educational seminars with local schools, companies and the public to help spread general space and satellite knowledge, and to publicize our team. We hope groups such as yours think this project is as unique, interesting, and valuable as we do!