

Integration into the Curriculum

All programs come with teaching materials for activities and lessons to be undertaken prior to and after the visit to VSSEC. This teaching resources follows Victorian Educational Learning Standards (VELS) and VCE guidelines.

Teacher Professional Development

VSSEC will act as the focus for a continuous professional development program. This will involve an initial one to three day teacher professional development session followed by online mentoring, access to lesson plans and further professional development. VSSEC supports an exchange program for both local and international teachers.

Online Resources

VSSEC will provide online resources to support its one-day student programs. The website will provide mission manuals and preparatory material for student visits as well as post visit material to allow students to continue their involvement back at their own school.



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Victorian Space Science Education Centre



The Victorian Space Science Education Centre (VSSEC) actively promotes the learning of science through engaging educational activities and programs. VSSEC provides a unique collaborative research and education centre, and as part of a global network of Space Science Centers and Institutions, offers a link between local and international business and industry.

Programs

VSSEC primarily caters for high school students and their educators, providing separate programs for year 11-12 Victorian Certificate Education students. Students in the critical years for science education in years 9 and 10 are offered a scenario-based 'hands-on', space science program. VSSEC also offers teacher professional development programs.

The Centre

The Centre was designed by award winning architects and incorporates a research-standard laboratory, theatre, and conference facilities as well as a Mission Control Room linked by audio-video to the Space Laboratory and the Planetary Surface Simulation Room.



Planetary Surface Simulation Room

The surface reproduces a small crater on Mars. The floor was designed by Associate Professor Lachlan Thompson (RMIT), and contains interactive soil 'tiles'. The rim is lined with rocks for specimen collection, and the whole crater is encased in an inflatable dome backlit with pre-programmed special effects to heighten our dramatic narrative.

Space suits

Simulated space suits have been designed and constructed by the MarsSkin team of James Waldie and Nat Cutler from the Mars Society. The astronaut suit includes a helmet, communications and ventilation system.

Mars & Space Lab Missions

These programs are designed to provide a richness and depth of experience not possible in schools. The environment will enhance students' decision-making skills, teamwork, leadership and problem-solving abilities. Students will suit-up for a field trip on a simulated Martian surface, or a flight to fully equipped Space Laboratory and conduct experiments under the direction their ground team in Mission Control.

VCE Programs

Programs have been designed with VCE Physics, Chemistry and Biology units 1–4 and relate to school assessed course work. Activities will be undertaken in the Centre's fully equipped research-standard laboratory and involve experimental activities, data collection

and analysis.

Outreach

VSSEC engages both national and international audiences through science festivals and Outreach programs such as *Bees in Space*.

Other Programs

Science Extension Programs have been developed for students with a special interest in science and mathematics. The programs will provide enrichment activities, tutorials and seminars.

Program Development

Curriculum programs at VSSEC have been developed in conjunction with NASA education, European Space Agency, Victoria University, RMIT University, LaTrobe University, Monash University and Macquarie University (ACA).

