Southern Alberta Institute of Technology

Hands-on learning in a virtual world

In response to COVID-19, SAIT has had to rethink program delivery and pivot quickly to ensure a safe learning environment for our community of students, faculty and staff. As a technical training institution that provides students with industry-relevant skills, we had to think about how our applied, hands-on education model could translate to a digital experience for students?

The challenge to deliver these skills to our students virtually was met with enthusiasm. Instructors and staff across all programs and departments rose to the challenge, finding unique ways to bring the in-person experience online.

Our support services across campus shifted from in person to virtual appointments within three business days. The International Centre advocated to have fees reduced or removed for online learners, and adjusted the refund and deferral policies. They also worked with our Residence and the Calgary International Airport to manage international arrivals and quarantine requirements.

Our Centre for Learning and Technology developed a course for all faculty, that would prepare them for delivering their course materials online – ensuring our students were set up for success with faculty who could assist them every step of the way. Students in our e-Learning programs that were unable to travel to Canada were assigned laptops from one of our many computer labs, which allowed them to remotely access software needed to complete course work.

Technology such as Building Information Modeling (BIM), Virtual Design Construction (VDC), 3D modeling and Virtual Reality (VR) software became an important component of changing our hands-one learning to online delivery.

SAIT's Optician diploma program, one of the newest diploma programs in the School of Health and Public Safety, is using a 3D replica of an eye for students to practice their skills on. You'll find students in our automotive programs using augmented reality to transform photo diagrams into interactive models that allow for a better understanding of the material. Pipe Trades instructor Fred Bretzke had already been incorporating advanced technology into his teaching, which his students love and want to see more of. Thanks to 3D modelling and AR, teaching the theory of trades is possible online.

Even our students in the Radio, Television and Broadcast News program carried on despite physical distancing by contributing content remotely with Open Broadcaster Software and using Microsoft Teams for interviews. SAIT instructors in our culinary programs have also used Microsoft Teams and social media platforms like YouTube to deliver captivating video tutorials on the intricacies of culinary skills such as cake decorating, meat preparation and plating.

When it comes time to apply theory in a hands-on environment, SAIT has found ways to make in-person learning possible. Small cohorts, physical distancing and enhanced sanitization measures make it possible for students to learn and practice hands-on skills in our state-of-the-art labs and classrooms. This blended delivery of virtual and in-person training will allow our students to develop the skills they need to succeed in their future careers in business, construction, energy and environment, hospitality and tourism, health, information and communications technologies, manufacturing, and transportation.

Learn more about SAIT programs for international students at:
www.sait.ca/international.