

Virtual Robotics Training Academy

A new division of InspireTech Canada focused on providing learners and educators across the globe with industry level robotics education; and access to industry led experiences that support the advancement of Science, Technology, Engineering & Mathematics. Virtual Robotics Training Academy was established to provide High-School aged learners & educators in Northern Ontario with access to the "Real World Advantages of using Simulators in Training, Teaching, and Practice". InspireTech Canada in collaboration with Taiga Robotics is excited to announce that all High-School aged learners and educators can now easily gain direct access to a Browser-Based Robotics Simulator & Educational Platform for Robotics and Automation.

School Boards are now able to register their SHSM learners and staff or faculty to participate in this, Repeatable Sector Partner Experience that can be teacher led or Self-Led. Contact, Kyle Boyko via email at Kyle.Boyko@inspiretech.ca

The fee to participate in this SPE is only \$50 per student or faculty learner plus applicable taxes. Assisting Learners on their path of Continuous Improvement SAFELY.

Learners and faculty across the province now have the opportunity to participate in a Specialist High Skills Major (SHSM) Sector Partner Experience (SPE) focused on Industrial Robotics, Coding and Design Thinking. With the support of industry experts this training will promote STEM, digital literacy, numeracy and entrepreneurial skill development, student engagement and student success.

Learners and educators are given the opportunity to participate remotely, collaborate with other like-minded individuals and industry experts to understand the importance that Robotics and related skills have in our world today.







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For more information contact:

Kyle Boyko President & CEO Inspire Tech Canada Corp. 416-575-0915 https://inspiretechcanada.ca Learners and faculty are able to access the, Repeatable Pick & Place Challenge Session so they can;

Learn how to use the web-based simulator environment.

Learn how to move the robot arm within the web-based simulator environment. Learn how to move the robot in a path within the web-based simulator environment. Learn how to do simple inverse kinematics (or use provided tools) within the web-based simulator environment. Learn how to get environment information, eg: [{"red":"x,y,z"}, {"red":"x,y,z"}, {"green":"x,y,z"}, {"red":"x,y,z"}, {"blue":"x,y,z"}] Learn how to move the robot arm based on

Learn how to move the robot arm based or inputs above.

Participants would first access the introduction video to the Pick & Place Challenge which will be posted on YouTube.

The video would highlight the leading industry organizations that are supporting the VRTA from, Taiga Robotics, Innovative Automation Inc & Festo Didactic. Each organization will provide a brief outline of the variety of roles that industrial roboticstechnology plays locally and globally, through videos. An overview of the "Pick & Place Challenge" and the task will be outlined. Once the video has been reviewed, the participants would next read the Student Manual and System Operating Manual. These documents provide learners or faculty everything they need to login individually or in teams of up to 5 to complete the challenge. Allowing for teachers to check the individual learners work or teams work at a time of their choice thereafter.



As global leader in automation technology, Festo & Festo Didactic have a holistic approach to supporting industry and education in this field. Automated Pick and Place systems are found in many industry sectors. The skills to design/build these systems are at the core of automation, production, and manufacturing and in high demand. Secondary School students possessing skills in this area will be better prepared to enter into post-secondary education programs for Mechatronics and Automation"

Regards, Greg James Regional Sales Manager Festo Didactic Ltd

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McMaster is one the world's top 75 universities and is Canada's most research-intensive university. Partnerships with industry, especially in the advanced manufacturing sector, is critical to McMaster's mission and success. The pick and play system is evident in the numerous industry driven projects that the university is involved with and exposing the technology to students, especially, at a young age, is critical to ensure that students are prepared for the challenges that industry will present

Dr. Darren Lawless Assistant Vice-President Research Innovation Partnerships Office of Vice-President, Research McMaster University

Innovative Automation's vision is to be the first choice provider of automation solutions to global leaders in manufacturing. To achieve this vision, we must constantly invest in the growth of our employees. Within our state of the art new manufacturing facility in Barrie, Ontario, we have developed a team of skilled Innovators for whom it is second nature to design, build and test automation solutions using the latest technology available. We are partnering with Inspire Tech Canada on this advanced education project to generate interest in STEM careers in our community, and to challenge the future generation of Innovators.

Innovative Automation Inc

VRTA) provides school boards, their educators and learners across the province with the most advanced solution to access an exciting and convenient, Sector Partner Experience. (VRTA) provides Innovation Creativity and Empathy (ICE) training to learners. (VRTA) provides a safe, virtual, Browser-Based, repeatable SPE activity with flexible options for learners and educators to access at a cost of \$50 per learner plus applicable taxes.



BENEFITS OF USING THE VRTA, BROWSER-BASED EDUCATIONAL PLATFORM

The use of simulation in formal education has been in existence for more than 200 years and the approach has been applied widely in medical & aviation.

Presently, there is a greater use of simulation in business and education disciplines.

Use of simulation tools have shown success in creating engaged and meaningful learning environments in various academic fields.

In engineering, simulation broadly refers to a technological device or model which can facilitate elements of reality for supplying practical experiences and learning enhancement.

Simulation tools offer collaborative and supportive learning opportunities for imitating risky actions in a safe and corrective learning environment.

