

NSF-ATE Project: ROBO Teams

Robotics Training in Education and Advanced Manufacturing Sectors ATE Project 1937661 | Chippewa Valley Technical College, Eau Claire, WI PI: Tim Tewalt, ttewalt@cvtc.edu, 715-874-4630, cvtc.edu



Note to ATE Community: The project started on October 1, 2019 and as we were starting to get ready to implement our plans COVID hit. As a result many of our activities that would normally be shared are now starting to take form in our second year and also depending on the limitations we all face during the pandemic. If this projects seems like it has things you're interested in please contact me and I'll update as we see things take form. Thank you for understanding. Respectfully, Tim Tewalt, PI

Objective 1: participating secondary students will demonstrate mastery of core competencies in robotics operation as measured by the obtainment of the Smart Automation Certification Alliance (SACA) Industry 4.0 Associate Robot System Operations Certification.

- a) Utilizing input from regional employers, develop curriculum and supporting materials for modules focusing on robotics operation.
- b) Deliver robotics operation modules within CVTC's Industrial Mechanic Technician, Automation Engineering Technology, Mechanical Design Technology, and Welding programs.

Objective 2: To meet the needs of incumbent workers in industries upgrading to robotics technology, workers from employers will attend CVTC's open lab format and employers will utilize CVTC's Mobile Manufacturing Lab onsite throughout the grant period.

- a) Advertise robotics training to industry partners interested in contracted training for their workforce.
- b) Deliver robotics training to incumbent workers in an open lab format at the Eau Claire, Menomonie, and River Falls campuses.
- c) Utilize CVTC's Mobile Manufacturing Lab to provide robotics modules onsite at various employer locations.
- d) Upon completion of robotics operation modules, provide opportunity for incumbent workers to obtain the Smart Automation Certification Alliance (SACA) Industry 4.0 Associate Robot System Operations Certification.

Objective 3: Deliver robotics training to high school students through the integration of robotics modules into curriculum.

- a) Collaborate with regional high schools to integrate robotics operation modules into curriculum, providing ongoing support throughout project period.
- b) Provide training and instruction to high school faculty during professional development opportunities, introducing them to robotics modules, equipment and how to integrate into curriculum.
- c) Utilize CVTC's Mobile Manufacturing Lab to introduce robotics modules onsite at rural high school locations.
- d) Provide dual credit opportunities in robotics operation content areas.