

CEI Launches New Mechatronics Program with State-of-the-Art Robot



IDAHO FALLS, Idaho — College of Eastern Idaho (CEI) is proud to announce the arrival of the most advanced type of industrial robot, the FANUC Robot 200iD, as a core element of its brand-new Mechatronics program. The new program is enrolling its first students this upcoming fall semester.

The advanced robot – acquired thanks to a Leading Idaho 2.0 grant – is known for its precise movements and versatility and will play a critical role in preparing students for careers in advanced manufacturing and other industrial sectors.

FANUC is widely recognized as the gold standard in robotics, making it an ideal tool for teaching and certifying students in robotics technology. As part of the Mechatronics program, students will learn to program robots and other control processors for various tasks using specialized computer coding languages like TPP, Python, and Rockwell Automation.

"With the introduction of the FANUC Robot 200iD, we are setting a new standard for mechatronics education at CEI and the State and the region," said Gary Holyoak, head of the new Mechatronics program. "This robot offers our students the opportunity to gain hands-on experience with cutting-edge technology and develop the skills needed to excel in the rapidly evolving field of robotics." The program will have several more robots by the end of this year.

The FANUC robot's capabilities extend far beyond basic functions and can be fitted with a wide range of attachments called "end effectors" for diverse industrial applications. In the program students will learn DC and AC electronics, digital circuits, mechanical principles, basic milling, 3D printing, pneumatics and hydraulics, motor controls, programming, and troubleshooting. All taught hands-on through practical, real-world projects.

"Programming these robots is math in practice for students," said Rick Aman, President of CEI. "Mechatronics is primarily Science, Technology Engineering and Math (STEM) learning, but CEI's Program anticipates practical training, including welding and machining certifications in the curriculum which are often paired in modern manufacturing jobs. We are committed to providing our students with the knowledge and experience they need to get good family wage jobs," Aman concluded.

President Rick Aman and others from CEI recently visited to Nucor Steel in northern Utah where they saw the significant role that mechatronics plays in modern manufacturing. Nucor is installing over 70 similar robots to automate the production of steel trusses and joists, as large as 120 feet long.

"The curriculum we have developed for our Mechatronics program aligns well with the training a CEI student would need to land a great job with Nucor or any other similar type of company," remarked Gary Holyoak, head of CEI's new Mechatronics program, after his visit to Nucor. "And we're grateful to Micron and other companies as they have supported the program's development and expressed earnest interest in hiring its graduates."

The launch of the Mechatronics program represents a significant new dimension for CEI in its mission to provide high-quality education and workforce training to students.

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