Innovative Design Solutions (IDS) recently hosted Oakland University’s School of Engineering and Computer Science’s Industrial and Systems Engineering (ISE) students on a tour of their Sterling Heights plant.

The students experienced real-world manufacturing automation processes which uniquely complement their classroom experience.

IDS is a division of Lippert Components Inc. and is a designer, developer and manufacturer of electronic systems encompassing a wide variety of RV applications. They are also manufacturers of electronic systems for automotive, medical and industrial applications.

The ISE/SYS 5900 Industrial Automation Systems course was developed and is taught by Larry Osentoski, and is based on his more than 20 years of experience in industrial electronics and automation controls.

The course focuses on the study of major plant systems and sub-systems. The students apply course concepts and techniques on campus using the Industrial and Systems Engineering Department’s own S. and R. Sharf Computer-Integrated Manufacturing Laboratory's automated assembly system consisting of conveyors, Programmable Logic Controllers (PLCs), sensors and robots.

"As a result of my emphasis on hands-on experiential learning in the class, I approached my friend Mr. Rob Ford, President of IDS, to see if the plant would be willing to share some of their automation and manufacturing process success with our students," Osentoski said. “My firm, D Developments, Inc., has worked with Mr. Ford and IDS for well over a decade designing and developing ruggedized military grade electronic control units for a variety of client applications ranging from manned robotic platforms to Medium Tactical Wheeled Vehicles.”

"IDS is eager to collaborate with local universities as we are always looking for talent as we continue to grow our Michigan operations," Ford said. "Oakland University is right here in our backyard and we want to develop a mutually beneficial relationship. That started today with this tour and we look forward to more involvement going forward.”

Steve Spicuzzi, IDS Plant Manager, conducted the tour. His expertise and passion for his job was not lost on the students during the tour. A student Leonardo Sawaya noted, “All of us really appreciated the time Mr. Spicuzzi and the staff at IDS took to explain how their operations work. This allowed me to tie what I am learning in the classroom directly to a real-world application from process flow to plant automated testing."