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## OU to offer Master's in Systems Engineering degree

Oakland University's Department of Industrial and Systems Engineering is now offering a **Master's in Systems Engineering** program with a focus on systems integration.

"Our department has a strong history in systems engineering, and with this master's program we are looking to serve mechanical, electrical and other engineers involved in product design and development," said Robert Van Til, Ph.D., chair and Pawley professor of lean studies in the Industrial and Systems Engineering (**ISE**) Department.

"There has always been a demand for Systems Engineers in Southeast Michigan, primarily from the automobile and defense industries," Van Til added. "But with the growing interest in connected vehicles and other connected products, the demand for Systems Engineers is expanding rapidly in all industries."

Systems Engineering is the most difficult job for companies to fill with an estimated 1,388 annual job openings in the Southeast Michigan region between 2016 and 2026, according to a **Connected Mobility Industry's Skills Needs Assessment Project**(SNAP) report issued by the Oakland County Executive and the Oakland County Workforce Development Board in March 2017.

"With the rapid advances in connected and autonomous vehicles, the need for skilled Systems Engineers is unprecedented," said Tracey Stanyer, senior systems engineer at ESG Automotive Inc. "Graduates with the skill set to synthesize across engineering disciplines and get the overall engineering process will have employers beating down their door with job offers."

The Oakland University program is open to engineers with a degree in any field of engineering, including mechanical, electrical and computer engineering. No preliminary or make-up courses are required.

"Where other engineering disciplines concentrate on the specifics of a system, Systems Engineers focus on the integration of all of these aspects into a coherent and effective system," said Vijit Pandey, Ph.D., an assistant professor in the ISE Department.

While the program is built around a core of the courses listed below, the flexible nature of the course requirements allows students to tailor the program to meet their career needs:

- Foundation of Systems Engineering I
- Foundation of Systems Engineering II
- Engineering Project Management
- Product Lifecycle Management
- Engineering Decision Analysis

"The Systems Engineering M.S. educates engineers to serve as the primary interface between management, customers, suppliers and specialty engineers in the systems development process," Pandey said.

Students may enter the program at any time of the year and begin their classes in either September, January or May due to the flexible nature of the course requirements.

"Many engineers working full-time will enroll in the Systems Engineering M.S. program on a part-time basis since all courses are offered in



*A Master's in Systems Engineering program with a focus on systems integration is now being offered by Oakland University's Department of Industrial and Systems Engineering.*

For more information about the program, including course requirements, visit the [Master's in Systems Engineering](#) website.