Bachelor of Science in Engineering with a major in Industrial and Systems Engineering

Major Requirements

<table>
<thead>
<tr>
<th>Oakland University Courses</th>
<th>Oakland Community College Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 2010</td>
<td>ECO 2620 or ECO 2610 accepted</td>
</tr>
<tr>
<td>MTH 1554</td>
<td>MAT 1710 or MAT 1730</td>
</tr>
<tr>
<td>MTH 1555</td>
<td>MAT 1740</td>
</tr>
<tr>
<td>MTH 2554</td>
<td>MAT 2740</td>
</tr>
<tr>
<td>APM 2555</td>
<td>MAT 2810 and 2880</td>
</tr>
<tr>
<td>CHM 1430</td>
<td>CHE 1510 accepted</td>
</tr>
<tr>
<td>PHY 1610</td>
<td>PHY 2400 accepted</td>
</tr>
<tr>
<td>PHY 1620</td>
<td>PHY 2500 accepted</td>
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<tr>
<td>EGR 1200</td>
<td>CAD 1201 or 2102 or 2110 or 2131</td>
</tr>
<tr>
<td>EGR 1400</td>
<td>CIS 2656</td>
</tr>
</tbody>
</table>

Approved math and science electives (choose one, students are encouraged to contact an advisor to select)

BIO 1530 and BIO 1560, BIO 2560, CHE 1520

GENERAL EDUCATION REQUIREMENT:
Please go to General Education Transfer Guide for an overview and more details on the options to fulfill Oakland University's General Education requirement.

MICHIGAN TRANSFER AGREEMENT (MTA):
When choosing to complete MTA, please confirm the best courses to take to fulfill the agreement with your academic adviser at OCC or at MTA Approved Courses.

Additional course requirements for MTA when following this major guide
(minimum 30 credit hours required for MTA):
ENG 1510 & 1520 (ENG 1520 is a pre-requisite for coursework at OU)
MTA Approved Social Science
MTA Approved Humanities
MTA Approved Humanities

TRANSFERRING WITHOUT MTA: If you plan to transfer without completing the MTA, please reference the General Education Transfer Guide for the OCC courses you can take to satisfy OU’s individual General Education categories. The below OU categories must still be satisfied when following this major guide (categories met by courses you will take at OU to complete this major are excluded from list):

- Writing Foundations
- Arts
- Foreign Language
- Global Perspective (satisfied by ECON 2110 if chosen)
- Literature
- U.S. Diversity

Please contact the School of Engineering and Computer Science Academic Advising Office at (248)370-2201.
TALKING POINTS:


Career Consultants to assist with resume building, internship/job searching, network events and more. Employers from 120 companies participated in the 2017 Engineering and IT career fair, in search of Oakland students to fill internship and full-time opportunities.

Student and Professional Organization involvement opportunities.

Different Scholarship opportunities await to help pay for your education.

Information Technology and Computer Science majors have an internship/research requirement that helps students gain meaningful experiences. Check out all of the Undergraduate Research opportunities available.

Lunch & Learns, Meet & Greets, and Lunch Lecture Series allow students to meet representatives from companies like GM, Argus Cyber Security, United States Army Tank Automotive Research, Development and Engineering Center (TARDEC) and many more that hire OU students.

Participate in competitions such as Intelligent Ground Vehicle, Formula SAE, North American International Auto Show in Detroit, and Maker’s Faire.

Check out some of the videos highlighting OU students’ work Formula SAE Racing, Maker Faire 2017- Blue Ribbon Winner, Maker Faire 2016. OU students know how to have fun- Harlem Shake 2013 & Harlem Shake 2015.

Student-built Loon Copter won $1 million prize in International Drones for Good Competition.

77% of SECS students completed an internship during the 2015-2016 academic year.

The overall placement rate of SECS students during the 2015-2016 academic year was 97%.

OU is the top-producing school for self-driving vehicle workers.

Oakland University’s School of Engineering and Computer Science (SECS), in collaboration with Professional and Continuing Education (PACE) has partnered with DCT Aviation of Waterford, Mich. to develop a new, two-course sUAS Remote Pilot Certificate Program. The two-course program is specifically designed to provide both basic airman knowledge, hands-on flying skills, and preparation to apply for and pass the Federal Aviation Administration’s sUAS Remote Pilot Certification Test.

Oakland University has been designated as a National Center of Academic Excellence in Cyber Defense Education (CAE-CDE) through academic year 2023.