

Bachelor of Science in Engineering with a major in Industrial & Systems Engineering (2017/18 Catalog)

| Major Requirements | |
|-----------------------------|-----------------------------|
| Oakland University Courses | Delta College Courses |
| ECN 2010 | ECN 222 or ECN 221 accepted |
| MTH 1554 | MTH 161 |
| MTH 1555 | MTH 162 |
| MTH 2554 or APM 2663 | MTH 261 or MTH 260 |
| APM 2555 | MTH 263 <i>and</i> 264 |
| PHY 1610 | PHY 211 accepted |
| PHY 1620 | PHY 212 accepted |
| CHM 1430 | CHM 107 or CHM 111 accepted |
| EGR 1200 | CAD 214, 226; DRF 107 |

| Approved Science Electives (choose one, students are encouraged to contact an adviser to select) |
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| BIO 171, 172, 240, 241 (MTH 260, 261 cannot be used to satisfy major and elective requirement) |

MICHIGAN TRANSFER AGREEMENTS:

In many cases, it is to a student's advantage to complete the MTA or MACRAO agreement when fulfilling General Education requirements. This may allow for more flexibility when creating a schedule while at your community college. When choosing to complete MTA or MACRAO, please confirm the best courses to take to fulfill the agreement with your academic adviser at Delta or [MTA Approved Courses](#)

Additional course requirements for MTA when following this major guide (minimum 30 credit hours required for MTA):

- ENG 111 & 112 (ENG 112 is a pre-requisite for coursework at OU)
- MTA Approved Social Science
- MTA Approved Humanities
- MTA Approved Humanities

SPECIAL NOTE REGARDING MTA OR MACRAO: In some cases, completing the MTA or MACRAO agreement is not as practical. When using MTA or MACRAO, your ability to make the most efficient course selections at OU may be impacted depending on your accumulated credits and chosen OU major. For more details on whether or not it is recommended for you to complete MTA or MACRAO, please consult with an OU academic adviser.

If you plan to transfer without completing a transfer agreement, please reference the table below for courses that satisfy individual categories.

| GENERAL EDUCATION REQUIREMENTS | |
|---|--|
| 40 credits are required from categories 1-10. Each of these categories must be fulfilled by completing one course of at least 3 or more credits. A course may not be used in more than one of these categories. Please see OU Catalog for further information. | |
| 1. Writing Foundations | ENG 112 |
| 2. Formal Reasoning | Satisfied by MTH 161 |
| 3. Arts | ART 105, 151, 152; COM 215, 216; ENG 226; IHU 226; MUS 111, 112, 118, 119 |
| 4. Foreign Language and Culture | FR, GE, SPA 111, 112, 211, 212 |
| 5. Global Perspective | GEO 113, 222, 223, 255, 260; IHU 234; POL 221, 225; SOC 231, SSI 234 |
| 6. Literature | ENG 219, 220, 221, 222, 223, 228, 229, 241, 242, 245, 246, 269, 271, 272, 274, 276, 277, 278, 285; |
| 7. Natural Science and Technology | Satisfied by BIO 171, 172; CHM 111; PHY 211 |
| 8. Social Science | Satisfied by ECN 221, 222 |
| 9. Western Civilization | Satisfied by PHL 1310 at OU |
| 10. Knowledge Applications | Satisfied by MTH 162; PHY 212 |
| U.S. Diversity – May double count with categories 1-10 | COM 245; ENG 226, 274, 277, 278; HIS 215, 217, 221, 222, 225; IHU 202, 226, 280, 281; MUS 118, 119; POL 103, 105; SOC 211, 215 |
| Capstone & Writing Intensive in the Major | These general education requirements must be met by courses taken at Oakland University. |

Students who complete MTA or MACRAO according to this guide satisfy general education categories 1-9 and U.S. Diversity.

Notes:

- Please contact the School of Engineering and Computer Science [Academic Advising](#) Office at (248)370-2201.

Talking Points

- ABET accredited programs (Mechanical Engineering, Computer Engineering, Electrical Engineering, Industrial & Systems Engineering, Information Technology and Computer Science).
- 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.