

Bachelor of Science in Engineering with a major in Electrical or Mechanical Engineering (2017/18 Catalog)

| Major Requirements | | |
|----------------------------|--|--------------------------------|
| Oakland University Courses | | Mott Community College Courses |
| ECN 2010 | | ECON 222 or ECON 221 accepted |
| MTH 1554 | | MATH 170 |
| MTH 1555 | | MATH 180 |
| MTH 2554 | | MATH 250 |
| APM 2555 | | MATH 270 and MATH 280 |
| PHY 1610 | | PHYS 287 accepted |
| PHY 1620 | | PHYS 288 accepted |
| CHM 1430 | | CHEM 131 accepted |
| EGR 1200 | | CADD 201 or CADD 202 |
| EGR 2400 | | ELEC 133 and ELEC 139 |

Choose one approved math/science elective (Students should contact an adviser to discuss all options available, numerous options at OU)
BIOL 111, CHEM 132, (EE/CE double majors are advised to complete APM 2663 at OU)

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 Mott or [MTA Approved Courses](#)

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

- ENGL 101 & 102 (ENGL 102 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 | ENGL 102, 104 |
| 2. Formal Reasoning | Satisfied By MATH 170 |
| 3. Arts | ART 110, 111, 112, 116; FILM 181; MUS 180, 182, 183, 186, 187, 271, 272; THTR 110 |
| 4. Foreign Language and Culture | ARBC, CHI 111, 112; FREN 151, 152, 251, 252; GERM, JAPA, RUSN 111, 112, 211, 212; SPAN 181, 182, 281, 282 |
| 5. Global Perspective | ANTH 200, 211; GEOG 142; HIST 152; PHIL 251; PSCN 275 |
| 6. Literature | ENGL 220, 221, 222, 223, 225, 227, 231, 232, 235, 240, 242, 253, 271 |
| 7. Natural Science and Technology | Satisfied By BIOL 111, CHEM 131, PHYS 287 |
| 8. Social Science | Satisfied By ECON 221, 222 |
| 9. Western Civilization | Satisfied By PHL 1310 at OU |
| 10. Knowledge Applications | Satisfied By MATH 180, PHYS 288 |
| U.S. Diversity – May double count with categories 1-10 | ENGL 223, 235; FILM 181; HIST 154, 155, 254, 255; MUS 182; PSCN 170; SOCY 191, 294 |
| 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.

Recent Course Changes:

HIST 152 may be used to satisfy either the Global Perspective or Western Civilization category of General Education, must be transferred in before the start of Fall Semester 2019.

HIST 151 may be used to satisfy the Western Civilization General Education category, must be transferred in before the start of Fall Semester 2019

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.