

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

Major Requirements	
Oakland University Courses	Schoolcraft College Courses
ECN 1500 or 2010	ECON 103 or ECON 202 or (ECON 201 accepted)
MTH 1554	MATH 150
MTH 1555	MATH 151
MTH 2554	MATH 240
APM 2555	MATH 252 <i>and</i> MATH 230
PHY 1610	PHYS 211 accepted
PHY 1620	PHYS 212 accepted
CHM 1430	CHEM 111 accepted
EGR 1200	CAD 211 or CAD 221

Approved math and science electives (choose one, students are encouraged to contact an advisor to select)
BIO 120, 130, 237 <i>and</i> 238

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 Schoolcraft or [MTA Approved Courses](#)

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

- ENG 101 & 102 (ENG 102 is a pre-requisite for OU coursework)
- 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 102
2. Formal Reasoning	Satisfied by MATH 150
3. Arts	ART 115, 116, 201; ENG 200; HUM 150, 215; MUSIC 105, 149, 164, 165; THEA 101, 231, 232
4. Foreign Language and Culture	CHIN, ITAL 101, 102; ARB, FR, GER, SPAN 101, 102, 201, 202; ENG 280
5. Global Perspective	ANTH 112, 201; GEOG 133; POLS 207, 209
6. Literature	ENG 170, 243, 244, 245, 246, 248, 251, 252, 275
7. Natural Science and Technology	Satisfied by BIOL 120, 130, CHEM 111, PHYS 211
8. Social Science	Satisfied by ECON 103, 201, 202
9. Western Civilization	Satisfied by PHL 1310 at OU
10. Knowledge Applications	Satisfied by MATH 151, PHYS 212
U.S. Diversity – May double count with categories 1-10	ANTH 214; ENG 200; HIST 151, 152, 153; POLS 105; SOC 201, 210;
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.