

Bachelor of Science with a major in Bioengineering

Major Requirements

Oakland University Courses	Northwestern Michigan College Courses
MTH 1554	MTH 141
MTH 1555	MTH 142
MTH 2554	MTH 241
APM 2555	MTH 251
PHY 1610 and 1620	(PHY 221/221L/221R and 222/222L/222R) accepted
CHM 1440 and 1470	CHEM 150, 150R, and 150L
CHM 1450 and 1480	CHEM 151, 151R, and 151L
CHM 2340	CHEM 250 and 250L
BIO 1200	BIO 115 and 115L
BIO 1201	Satisfied by completing (BIO 115/115L and BIO 116/116L)
BIO 2600	Satisfied by completing (BIO 227/227L and 228/228L)
EGR 1200	DD 170
Economics Requirement	ECO 201 or 202

There are four professional track options to choose from. The courses below apply to the specific track listed. It is recommended to meet with an academic adviser at OU to discuss the different track options.

Oakland University Courses	Northwestern Michigan College Courses
CSI 3450 (Bioinformatics Track)	CIT 178
ME 3250^ (Tissue Engineering Track)	EGR 202^

^Students who take this equivalent at NMC are required to take a 1 credit lab at Oakland University

Students may transfer an unlimited amount of credit from NMC, and must complete a minimum of 45 credit hours from OU to meet degree requirements. As programs may limit how much transfer credit can be used toward requirements, **it is highly recommended that students work with both an OU academic adviser and their NMC academic adviser to maximize the applicability of coursework to specific requirements.**

TRANSFERRING WITH THE MICHIGAN TRANSFER AGREEMENT (MTA):

When choosing to complete MTA to satisfy General Education, please confirm the best courses to take to fulfill the agreement with your academic adviser at NMC or at the [NMC MTA Approved Courses](#) website. Completing MTA when following this major guide will satisfy OU's transferable General Education requirements.

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

- ENG 111
- ENG 112 (Review your MTA plans with an OU academic adviser)
- One MTA Approved Social Sciences course
- Two MTA Approved Humanities courses

TRANSFERRING WITHOUT MTA:

If you intend to transfer without MTA, you can choose to complete additional coursework to fulfill OU's individual General Education categories instead. When following this major guide, please reference the [NMC General Education Transfer Guide](#) for the NMC courses that satisfy these specific OU General Education categories:

- Writing Foundations (ENG 112)
- Arts
- Language and Culture
- Global Perspective
- Literature
- U.S. Diversity

All prospective students should call the School of Engineering and Computer Science (SECS) Academic Advising Office at (248) 370-2201 to schedule an appointment. Their office can also be contacted by email at secsadvising@oakland.edu, or visit their [website](#) for more information.

NOTES:

Transfer students are admitted directly to the major if they have a cumulative GPA of 2.8 or higher, if students have a GPA between 2.5 and 2.79, they are admitted as a “Candidate” to the SECS, and will need to meet established criteria to change their major.

Students apply for major standing once they have completed math, science, and core engineering courses.

Oakland University will always honor the **MACRAO transfer agreement** and apply it to the General Education requirement the same as MTA.

SCHOOL OF ENGINEERING AND COMPUTER SCIENCE (SECS) TALKING POINTS:

Learn more about OU's [ABET accredited programs](#): (Mechanical Engineering, Computer Engineering, Electrical Engineering, Industrial & Systems Engineering, Information Technology and Computer Science). **The first class of the Oakland University Bioengineering program under the new curriculum has already graduated in the winter of 2020. ABET evaluation site visit took place in November 2021. According to ABET policies, retroactive accreditation may be granted to cover students who graduated during the academic year prior to the evaluation visit. Based on the positive review, the OU Bioengineering program is to be officially granted accreditation by June, 2022. Therefore, any student graduating from the new curriculum at the end of or after fall 2020 will graduate from an ABET accredited program if the accreditation is granted in fall 2021.**

Learn about ways to [get involved](#) in over 20 student organizations affiliated with SECS, as well as different professional organizations related to careers in engineering and computer science!

OU students also participate in competitions such as Intelligent Ground Vehicle, [Formula SAE](#), North American International Auto Show in Detroit, GrizzHacks, and Maker Faire Detroit.

OU offers a number of [scholarship opportunities](#) to students in the School of Engineering and Computer Science to help pay for your education.

The School of Engineering and Computer Science offers a wide variety of [opportunities for undergraduate research](#).

SECS students can work with a career consultant about your resume, job search or to practice your interviewing skills. There are also a number of networking events each month and [resources available through Career Services](#). Employers from hundreds of companies participate in our annual Engineering and IT Career Fair in search of Oakland students to fill internship and full-time opportunities. 85% of SECS graduates from July 2019 to June 2020 completed an internship or internship-like experience.