



Transfer Student Success Center Transfer Planning Guide

Engineering—B.S. Degree

College of Engineering

<https://engineering.wayne.edu/> (313) 577-3780



This transfer plan will help guide you in making the transition from community college to Wayne State University.

WSU strongly recommends that all transfer students meet with a WSU advisor in order to ensure you are taking the correct courses before transferring. Schedule an appointment with an academic advisor through stars.wayne.edu/

Biomedical Engineering:	Namrata Murthy	nmurthy@wayne.edu
Chemical Engineering:	Tracy Castle	tfcastle@wayne.edu
Civil Engineering:	Elizabeth Hill	ekondrat@wayne.edu
Electrical Engineering:	Kate Edge	kedge2@wayne.edu
Industrial Engineering:	Cathleen Laporte	cathleen.laporte@wayne.edu
Mechanical Engineering:	Keith Wadley	keith.wadley@wayne.edu
Undecided:	Casey Rue	crue@wayne.edu

Bachelor of Science degree requirements for all of the following Engineering Majors

- Biomedical Engineering (BME)
- Chemical Engineering (CHE)
- Civil Engineering (CE)
- Electrical and Computer Engineering (ECE)
- Industrial and Systems Engineering (IE)
- Mechanical Engineering (ME)

WSU Title	WSU Course	Schoolcraft
Calculus I (QE)	MAT 2010	MATH 150
Calculus II (QE)	MAT 2020	MATH 151
Calculus III	MAT 2030	MATH 240
Linear Algebra and Differential Equations	MAT 2150 (or 2250+2350)	MATH 230+252
General Physics I (NSI)	PHY 2175	PHYS 211
General Physics II	PHY 2185	PHYS 212
Principles of Chemistry I (NSI)	CHM 1125/1130	CHEM 111
Intro. College Writing (BC)	ENG 1020	ENG 101
Tech Comm I: Reports (IC)	ENG 3050	ENG 116

Specific Engineering Major Requirements

BS Biomedical Engineering

WSU Title	WSU Course	Schoolcraft
Basic Biology I + Lab	BIO 1510 +BIO 1511	BIOL 120
Basic Engineering I	BE 1200	ENGR 100
Statics	CE/ME 2410	ENGR 201
Mechanics of Materials	CE/ME 2420	ENGR 202

BS Chemical Engineering

WSU Title	WSU Course	Schoolcraft
General Chemistry II + Lab	CHM 1145 + 1150	CHEM 117
Organic Chemistry I + Lab	CHM 1240 + 1250	CHEM 213
Organic Chemistry II-NO LAB	CHM 2225	CHEM 214
Basic Engineering I	BE 1200	ENGR 100
Basic Engineering II	BE 1300	MET 114

BS Civil Engineering

WSU Title	WSU Course	Schoolcraft
Basic Biology or Introduction to Life or Basic Life Diversity or Geology: The Science of Earth	BIO 1510 or 1050 or 1500 or ESG 1010 or 1500	BIOL 120 or BIOL 101 or BIOL 102 or EARTH 140 or EARTH 120
Basic Engineering I	BE 1200	ENGR 100
Statics	CE/ME 2410	ENGR 201
Mechanics of Materials	CE/ME 2420	ENGR 202

BS Electrical and Computing Engineering

WSU Title	WSU Course	Schoolcraft
Physics lab	PHY 2171 OR PHY 2181	PHYS 211 or 212
Basic Engineering I	BE 1200	ENGR 100
(SI) Principles of Macroeconomics or Microeconomics or Survey of Economics	ECO 2010 or 2020 or 1000	ECON 202 or ECON 201 or ECON 101

BS Industrial Engineering

WSU Title	WSU Course	Schoolcraft
Basic Engineering I	BE 1200	ENGR 100
(SI) Principles of Microeconomics	ECO 2010	ECON 202

BS Mechanical Engineering

WSU Title	WSU Course	Schoolcraft
Basic Engineering II	BE 1300	MET 114
Statics	CE/ME 2410	ENGR 201
Mechanics of Materials	CE/ME 2420	ENGR 202
Dynamics	ME 3400	ENGR 203

Once students apply to the College of Engineering, they may be admitted to the Professional Engineering program, the Pre-professional Program, or EOS bridge program, depending on their educational background and placement examination results. Please see here for more information: <https://wayne.edu/students/majors/engineering/>

Advising

For general questions about transferring credits, application processes, transfer pathways, scholarships, and the Michigan Transfer Agreement, schedule an appointment with a [Transfer Advisor](#) through stars.wayne.edu. You can also email transfer@wayne.edu or discover more at wayne.edu/transfer. For detailed, specific questions about the major, [email or schedule an appointment](#) with an Engineering advisor.

Transfer Credit Resources

- **Transfer Equivalency Self-Service**: This tool displays how your earned credits will transfer into specific Wayne State degree programs. This tool provides an unofficial degree audit that indicates how your transfer credit is applied, and which courses are still required to complete the degree.
- **Transfer Pathways**: The transfer pathways are agreements with Michigan community colleges that streamline the transfer credit process while providing a roadmap to earning your associate and bachelor's degrees.
- **Transfer Course Equivalency**: This tool allows you to research specific courses and how they transfer to Wayne State.
- **Michigan Transfer Agreement (MTA)**: The MTA can be earned at any Michigan community college to satisfy the Wayne State general education requirements. Each community college has an MTA-approved course list of its own, so please refer to the list of courses that your respective community college has approved for MTA.

Understanding Transfer Credit

- **What will transfer?** All college-level classes from regionally accredited colleges with a grade of 2.0 (C) or above will transfer. There are no specific limits to the number of transfer credits. However, each academic program has specific requirements that must be satisfied which helps determine the best number of credits to transfer.
- **How will it transfer?** Courses transfer as the number of credits earned at the college where you took the class. This is true regardless of the number of credits the Wayne State equivalent course is worth. Each transferred course will match one of the following types of credits:
 - **Equivalent credit** – matches a specific WSU course.
 - **Department credit** – transfer into the academic department without a specific WSU course match.
 - **Elective credits** – transfer as general or elective credit (GEN 1XXX or GEN 2XXX).

Transfer Admissions Requirements

To transfer to Wayne State, you must have at least 24 transferable credits of previous college work and a minimum 2.5 cumulative GPA from all higher education institutions you have attended. If you have completed an associate degree, you may be admitted with a cumulative GPA of 2.0 or better. Visit wayne.edu/apply to complete the university application.

**** This plan is for informational purposes only. The University reserves the right to update this plan at any time without notice****