

# 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 <u>correct courses before transferring.</u> Schedule an appointment with an academic advisor through <u>stars.wayne.edu/</u>

Biomedical Engineering: Chemical Engineering: Civil Engineering: Electrical Engineering: Industrial Engineering: Mechanical Engineering: Undecided: Namrata Murthynmurthy@wayne.eduTracy Castletfcastle@wayne.eduElizabeth Hillekondrat@wayne.eduKate Rendikate.rendi@wayne.eduCathleen Laportehx4960@wayne.eduKeith Wadleykeith.wadley@wayne.eduCasey Ruecrue@wayne.edu

### Bachelors 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 Manufacturing Engineering (IE)
- Mechanical Engineering (ME)

| WSU Title                       | WSU Course     | OCC Course    |
|---------------------------------|----------------|---------------|
| Calculus I (QE)                 | MAT 2010       | MAT 1730      |
| Calculus II (QE)                | MAT 2020       | MAT 1740      |
| Calculus III                    | MAT 2030       | MAT 2740      |
| Linear Algebra and Differential | MAT 2150       | MAT 2880+2810 |
| Equations                       | (or 2250+2350) |               |
| General Physics I (NSI)         | PHY 2175       | PHY 2400      |
| General Physics II              | PHY 2185       | PHY 2500      |
| Principles of Chemistry I (NSI) | CHM 1125/1130  | CHE 1510      |
| Intro College Writing (BC)      | ENG 1020       | ENG 1510      |
| Tech. Comm II: Prsnt (IC)       | ENG 3050       | ENG 2200      |

### **Specific Engineering Major Requirements**

#### **BS Biomedical Engineering**

| WSU Title                        | WSU Course         | OCC Course |
|----------------------------------|--------------------|------------|
| Basic Biology I + Lab            | BIO 1510 +BIO 1511 | BIO 1530   |
| Basic Engineering I              | BE 1200            | EGR 1100   |
| Intro to Prog & Computation ENGR | BE 1500            | EGR 2010   |
| Materials Science for ENGR       | BE 1300            | MSE 1000   |
| Statics                          | ME 2410            | EGR 2100   |
| Mechanics of Materials           | ME 2420            | EGR 2200   |

## **BS Chemical Engineering**

| WSU Title                   | WSU Course      | OCC Course                   |
|-----------------------------|-----------------|------------------------------|
| General Chemistry II + Lab  | CHM 1145 + 1150 | CHE 1520                     |
| Organic Chemistry I         | CHM 1240        | CHE 2610                     |
| Organic Chemistry Lab I     | CHM 1250        | CHE 2650                     |
| Organic Chemistry II-NO LAB | CHM 2225        | CHE 2620                     |
| Basic Engineering I         | BE 1200         | EGR 1100                     |
| Materials Science for ENGR  | BE 1300         | MSE 1000                     |
| (CI) Prof. Ethics           | PHI 1120 (CI)   | No Equivalent course must be |
|                             |                 | taken at WSU                 |

## **BS Civil Engineering**

| WSU Title                             | WSU Course                      | OCC Course                       |
|---------------------------------------|---------------------------------|----------------------------------|
| Basic Biology or Introduction to Life | BIO 1510 or 1050 or 1500 or ESG | BIO 1530 or BIO 1511 or BIO 1560 |
| or Basic Life Diversity or Geology:   | 1010                            |                                  |
| The Science of Earth                  |                                 |                                  |
| Basic Engineering I                   | BE 1200                         | EGR 1100                         |
| Intro to Prog & Computation ENGR      | BE 1500                         | EGR 2010                         |
| Statics                               | CE 2410                         | EGR 2100                         |
| Mechanics of Materials                | CE 2420                         | EGR 2200                         |

## **BS Electrical and Computing Engineering**

| WSU Title                            | WSU Course               | OCC Course                   |
|--------------------------------------|--------------------------|------------------------------|
| Basic Engineering I                  | BE 1200                  | EGR 1100                     |
| Intro to Prog & Computation ENGR     | BE 1500                  | EGR 2010                     |
| (CI) Prof. Ethics or Intro to Ethics | PHI 1120 (CI) or 2320    | PHI 1610                     |
| (SI) Principles of Macroeconomics    | ECO 2010 or 2020 or 1000 | ECO 2620 or ECO 2620 or ECON |
| or Microeconomics or Survey of       |                          | 110                          |
| Economics                            |                          |                              |

# **BS Industrial Engineering**

| WSU Title                  | WSU Course    | OCC Course                   |
|----------------------------|---------------|------------------------------|
| Basic Engineering I        | BE 1200       | EGR 1100                     |
| Materials Science for ENGR | BE 1300       | MSE 1000                     |
| Microeconomics (SI)        | ECO 2010      | ECO 2620                     |
| (CI) Prof. Ethics          | PHI 1120 (CI) | No Equivalent course must be |
|                            |               | taken at WSU                 |

## **BS Mechanical Engineering**

| WSU Title                        | WSU Course    | OCC Course                   |
|----------------------------------|---------------|------------------------------|
| Intro to Prog & Computation ENGR | BE 1500       | EGR 2010                     |
| Materials Science for ENGR       | BE 1300       | MSE 1000                     |
| Statics                          | ME 2410       | EGR 2100                     |
| Mechanics of Materials           | ME 2420       | EGR 2200                     |
| Dynamics                         | ME 3400       | EGR 2020                     |
| (CI) Prof. Ethics                | PHI 1120 (CI) | No Equivalent course must be |
|                                  |               | taken at WSU                 |

### **Advising**

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

### **Transfer Credit Resources**

- <u>Transfer Equivalency Self-Service</u>: 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.
- <u>Transfer Pathways</u>: 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.
- <u>Transfer Course Equivalency</u>: 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 <u>wayne.edu/apply</u> 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\*\*