Transfer Plan for Henry Ford College

**Engineering – B.S. Degree**

College of Engineering

[engineering.wayne.edu](http://www.engineering.wayne.edu) (313) 577-2424

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/](http://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 Rendi kate.rendi@wayne.edu

Industrial Engineering: Gail Evans  gevans@wayne.edu

Mechanical Engineering: Keith Wadley  keith.wadley@wayne.edu

Undecided: Casey Rue crue@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)

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| **WSU Title**  | **WSU Course**  | **HFC Course** |
| Calculus I (QE) | MAT 2010 | MATH 180 |
| Calculus II (QE) | MAT 2020 | MATH 183 |
| Calculus III | MAT 2030 | MATH 280 |
| Linear Algebra and Differential Equations | MAT 2150 (or 2250+2350) | MATH 283+288 |
| General Physics I (NSI) | PHY 2175 | PHYS 231 |
| General Physics II | PHY 2185 | PHYS 232 |
| Principles of Chemistry I (NSI) | CHM 1125/1130 | CHEM 141 |
| Intro College Writing (BC) | ENG 1020 | ENG 131 |
| Tech. Comm II: Prsnt (IC) | ENG 3050 | ENG 135 |

**Specific Engineering Major Requirements**

**BS Biomedical Engineering**

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| **WSU Title**  | **WSU Course**  | **HFC Course** |
| Basic Biology I + Lab | BIO 1510 +BIO 1511 | BIO 152 |
| Basic Engineering I | BE 1200 | ENGR 130 |
| Intro to Prog & Computation ENGR | BE 1500 | ENGR 125 |
| Materials Science for ENGR | BE 1300 | ENGR 201 |
| Statics | ME 2410 | ENGR 232 |
| Mechanics of Materials | ME 2420 | ENGR 235 |

**BS Chemical Engineering**

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| **WSU Title**  | **WSU Course**  | **HFC Course** |
| General Chemistry II + Lab | CHM 1145 + 1150 | CHEM 142 |
| Organic Chemistry I  | CHM 1240  | CHEM 241 |
| Organic Chemistry Lab I | CHM 1250 | CHEM 243 |
| Organic Chemistry II-NO LAB  | CHM 2225 | CHEM 242 |
| Basic Engineering I | BE 1200 | ENGR 130 |
| Materials Science for ENGR | BE 1300 | ENGR 201 |
| Intro to Prog & Computation: PYTHON | BE 1600 | CIS 125 |
| (CI) Prof. Ethics  | PHI 1120 (CI)  | No Equivalent course must be taken at WSU |

**BS Civil Engineering**

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| **WSU Title**  | **WSU Course**  | **HFC Course** |
| 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 | BIO 152 or BIO 131 or GEOL 131 or BIO 1050 |
| Basic Engineering I | BE 1200 | ENGR 130 |
| Intro to Prog & Computation ENGR | BE 1500 | ENGR 125 |
| Statics | CE 2410 | ENGR 232 |
| Mechanics of Materials | CE 2420 | ENGR 235 |

**BS Electrical and Computing Engineering**

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| **WSU Title**  | **WSU Course**  | **HFC Course** |
| Basic Engineering I | BE 1200 | ENGR 130 |
| Intro to Prog & Computation ENGR | BE 1500 | ENGR 125 |
| (CI) Prof. Ethics or Intro to Ethics | PHI 1120 (CI) or 2320 | PHI 1610 |
| (SI) Principles of Macroeconomics or Microeconomics or Survey of Economics | ECO 2010 or 2020 or 1000 | BEC 152 or BEC 151 or BEC 133 |

**BS Industrial Engineering**

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| **WSU Title**  | **WSU Course**  | **HFC Course** |
| Basic Engineering I | BE 1200 | ENGR 130 |
| Materials Science for ENGR | BE 1300 | ENGR 201 |
| Intro to Prog & Computation: PYTHON | BE 1600 | CIS 125 |
| (CI) Prof. Ethics  | PHI 1120 (CI)  | No Equivalent course must be taken at WSU |
| Microeconomics (SI) | ECO 2010 | BEC 152 |

**BS Mechanical Engineering**

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| **WSU Title** | **WSU Course** | **HFC Course** |
| Intro to Prog & Computation ENGR | BE 1500 | ENGR 125 |
| Materials Science for ENGR | BE 1300 | ENGR 201 |
| Statics | ME 2410 | ENGR 232 |
| Mechanics of Materials | ME 2420 | ENGR 235 |
| (CI) Prof. Ethics  | PHI 1120 (CI)  | No Equivalent course must be taken at WSU |

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

**Michigan Transfer Agreement (MTA)**

A student whose community college transcript is endorsed as "MTA satisfied" has completed WSU's General Education Requirements. **The College of Engineering requires specific courses that also qualify as general education requirements. Meet with an advisor to ensure courses that satisfy MTA will also meet engineering specific requirements.** See here for specific MTA information and courses that qualify for MTA:

<https://wayne.edu/transfer/community-college/mta>

 6/2023