	<p align="center"> <b>Articulation Agreement Curriculum Guide</b>  <b>Henry Ford College</b>  <i>Associate of Science (AS) Pre-Engineering</i>  <b>Wayne State University</b>  <i>Bachelor of Science (BS) in Electrical Engineering</i>  <b>Effective: March 1, 2022 to February 28, 2027</b> </p>	
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**Students who follow this agreement and meet all requirements will earn the Michigan Transfer Agreement (MTA) and Pre-Engineering Associate of Science (AS) degree while transferring the maximum credit to WSU.**

### Henry Ford College - Michigan Transfer Agreement (MTA) Requirements



Specific courses listed under MTA categories fulfill HFC program core, support courses and/or WSU general education or program requirements.

Henry Ford College Courses		CREDIT HRS	Transfer to Wayne State University As		CREDIT HRS
Category One: 1 Course in English Composition					
*ENG 131	Introduction to College Writing	3	ENG 1020	English Composition I	3
Category Two: 1 Course in English Composition or Communication					
*ENG 135	Business & Technical Writing & Research	3	ENG 3050	Technical Writing	3
Category Three: 1 course in Mathematics					
*MATH 180	Calculus I	5	MAT 2010	Calculus I	5
Category Four: 2 courses in Social Sciences					
*BEC 151 <i>or</i> BEC 152	Principles or Macroeconomics Principles of Microeconomics	3	ECO 2010 <i>or</i> 2020	Principles or Macroeconomics Principles of Microeconomics	3
Complete one course from approved MTA Category Four list		3	Social Sciences Course		3
Category Five: 2 courses in Humanities and Fine Arts					
**PHIL 139 Intro Philosophy or Ethics		3	Intro to Ethics (PHI 2320)		3
Complete one course from HFC approved MTA Category Five list		3	Humanities & Fine Arts Course		3
Category Six: 2 courses in Natural Sciences from different disciplines (one lab required)					
*CHEM 141	Principles of General & Inorganic Chemistry I	5	CHM 1125/1130	General Chemistry I for Engineers / General Chemistry I Laboratory	5
*PHYS 231	Engineering Physics I	5	PHYS 2175	University Physics for Engineers I	5
MTA/General Education Subtotal Credits		33	Wayne State Transfer Subtotal		33

\*required for HFC Pre-Engineering AS degree and WSU Electrical Engineering BS degree

\*\*required for MTA and WSU Electrical Engineering BS degree

**See the HFC Associate of Science (AS) in Pre-Engineering requirements on the following page.**


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HFC Associate of Science (AS) <b>Pre-Engineering</b> Degree Requirements applied to WSU Bachelor of Science (BS) <b>Electrical Engineering</b> Degree					
Henry Ford College			Wayne State University		
Required Core and Support Courses for Electrical Engineering		CREDIT HRS	Transfer to Wayne State University As		CREDIT HRS
BEC 151 or 152	Principals of Micro or Macroeconomics	MTA	ECO 2010 or 2020	Principles or Macroeconomics Principles of Microeconomics	-
*CHEM 141	Principles of General & Inorganic Chemistry I	MTA	CHM 1125/1130	Gen Chem I for Engineers / Gen Chem I Lab	-
ENG 131	Intro to College Writing	MTA	ENG 1020	English Composition	-
ENG 135	Business and Tech Writing	MTA	ENG 3050	Technical Writing	-
*ENGR 125	Introduction to Computation for Engineers	3	BE 1500	Intro to Programming & Computation for Engineers	3
*ENGR 130	Intro to Engineering	3	BE 1200	Basic Engineering I: Design in Engineering	3
*PHYS 231	Engineering Physics I	MTA	PHYS 2175	Physics for Engineers I	-
*PHYS 232	Engineering Physics II	5	PHYS 2185/2181	Physics for Engineers I (w/lab)	5
*MATH 180	Calculus I	MTA	MAT 2010	Calculus I	-
*MATH 183	Calculus II	5	MAT 2020	Calculus II	5
MATH 283	Linear Algebra (replace MATH 275)	3	MAT 2250	Elementary Differential Equations (w/ MATH 288)	3
*MATH 280	Calculus III	5	MAT 2030	Calculus III	5
MATH 288	Differential Equations	5	MAT 2350	Elementary Differential Equations	5
<b>Pre-Engineering Subtotal Credits</b>		<b>29</b>	<b>Wayne State Transfer Subtotal</b>		<b>29</b>

Additional HFC Courses (meet WSU requirements)		CREDIT HRS	Transfer to Wayne State University As		CREDIT HRS
*ENGR 205	Digital Systems	4	ECE 2610	Digital Logic Design	4
<b>Additional Transfer Subtotal</b>		<b>4</b>	<b>Wayne State Transfer Subtotal</b>		<b>4</b>

*\*must be completed before enrolling in professional level electrical engineering courses (ECE 3000 level or higher) at Wayne State University.*

**See the Remaining Wayne State Bachelor of Science (BS) in Electrical Engineering requirements on the following page.**

 <p><b>HENRY FORD</b> COLLEGE FUTUREDRIVEN</p>	<p align="center"><b>Articulation Agreement Curriculum Guide</b>  <b>Henry Ford College</b>  <i>Associate of Science (AS) Pre-Engineering</i>  <b>Wayne State University</b>  <i>Bachelor of Science (BS) in Electrical Engineering</i>  <b>Effective: March 1, 2022 to February 28, 2027</b></p>	 <p align="center"><b>WAYNE STATE</b> UNIVERSITY</p>
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WSU Requirements for Bachelor of Science (BS) in Electrical Engineering		CREDIT HRS
BE 2100	Basic Engineering III: Probability and Stats in Engineering	3
CSC 2000	Intro to C++ Programming Language	3
ECE 3040	Numerical Methods in Engineering	3
ECE 3300	Intro to Electrical Circuits	4
ECE 3330	Electrical Circuits II	3
ECE 3570	Electronics	4
ECE 3620	Intro to Microcomputers	4
ECE 4330	Linear Systems and Signals	4
ECE 4340 <i>or</i> 4331	Microcomputer-Based Instrumental Lab or System and Signals Lab	2
ECE 4570	Fundamentals of Microelectronic Devices	3
ECE 4600	Capstone Design I	4
ECE 4700	Intro to Communication Theory	4
ECE	4000 or 5000 electives ( <i>See WSU advisor</i> )	8
ENG 3060	Technical Communication II: Presentations	3
Option	Electrical, Computer or Biomedical Electronics and Systems Option ( <i>See WSU Advisor</i> )	12
<b>Total Wayne State University Credit Hours</b>		<b>64</b>

**Notes:**

- Wayne State University will transfer a maximum of 66 credits towards the minimum total of 126 semester hours needed for the Bachelor of Science in Electrical Engineering degree. Courses must be approved for transfer, non-remedial and have a grade above a 2.0 ("C") or higher.
- Contact Henry Ford College [Advising](#) for questions regarding MTA at [advising@hfcce.edu](mailto:advising@hfcce.edu) or 313-317-6845
- Contact Wayne State University for questions regarding the *Electrical Engineering* major, admission requirements or to set up an appointment with an advisor at [ereetz@wayne.edu](mailto:ereetz@wayne.edu).