



EXHIBIT A - Articulation Guide
Henry Ford College
 Electrical/Computer Associate in Applied Science
University of Michigan - Dearborn
Bachelor of Science in Engineering in Robotics Engineering
Effective: April 1, 2023 to March 31, 2028



RECOMMENDED COURSES BY MAJOR

Students need not complete all recommended coursework prior to transfer.

Henry Ford College Electrical/Computer Associate in Applied Science degree and the University of Michigan Dearborn Bachelor of Science in Engineering in Robotics Engineering

Requirement Description	HFC Course / Title	UMD Equivalent	Meets DDC	UMD Major Requirement
GENERAL EDUCATION (29-30 credits)				
MTA ENGLISH COMP/COMMUNICATIONS (6 credits)	ENG 131: Introduction to College Writing ENG 135: Business and Technical Writing	COMP 105 COMP 270	✓ ✓	✓ ✓
MTA SOCIAL SCIENCE (6 credits)	BEC151 or 152 Behavioral and Social Sciences Course	ECON 201 or ECON 202 Behavioral and Social Sciences Course	✓ ✓	✓ ✓
MTA HUMANITIES & FINE ARTS (6 credits)	Humanities and Arts Course Humanities and Arts Course	Humanities and Arts Course Humanities and Arts Course	✓ ✓	✓ ✓
MTA MATHEMATICS (3-4 credits)	MATH 180: Calculus I	MATH 115	✓	✓
MTA NATURAL SCIENCES (7-8 credits, course with lab)	CHEM 141: Prin of Gen & Inorganic Chem I PHYS 231: Engineering Physics I	CHEM 134 PHYS 150	✓ ✓	✓ ✓
Total MTA Credits		33		
COLLEGE DEGREE REQUIREMENT				
REQUIRED COURSES	Math 183: Calculus II Math 280: Calculus III MATH 275: Discrete Math Math 288: Diff Eq + Linear	Math 116 Math 215 MATH 275/ ECE 276 Math 228		✓ ✓ ✓ ✓
REQUIRED COURSES	PHYS 232: Engineering Physics II	PHYS 152		✓
REQUIRED COURSES	ENGR 130: Intro to Engr <u>and</u> ENGR 125: Intro to Computation for Engr. ENGR 201: Science of Materials ENGR 232: Statics <u>and</u> ENGR 235: Mechanics of Materials ENGR 240: Circuits	ENGR 100 ENGR 250 ME 260 ECE 210		✓ ✓ ✓ ✓
Total Degree Credits		39		
Total Associates Degree Credits		72		



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COURSES TO BE TAKEN AT UMD

Requirement Description	UMD Course / Title	Credit Hours	Meets DDC	UMD Major Requirement
GENERAL EDUCATION REQUIREMENT*				
INTERSECTIONS	Take ONE Intersections DDC Courses		✓	
Total General Education Requirement		3		
MAJOR REQUIREMENT				
CORE COURSES	ECE 270: Computer Methods			
	ECE 273: Digital Systems			
	ECE 311: Electronics			
	ECE 3171: Analog and Discrete Sys.			
	ECE 3731: Microprocessors			
	ECE 347: Applied Dynamics			
	ECE 3641: Robotics 1			
	ECE 460: Operating Systems			
	ECE 370: Advanced Software Tech.			
	IMSE 381: Industrial Robots			
	ECE 4641: Mobile Robots			
	ECE 4987: RE Senior Design 1			
	ECE 4988: RE Senior Design 2			
	ENT 400: Entrepreneurship			
	Prof Elect (Upper Level)			
	Prof Elect (Upper Level)			
Total Core Course Credits		58-59		✓
Total Credits to be Taken at UMD		61-62 Credits		