

# **EXHIBIT A - Articulation Guide**

#### **Henry Ford College**

Electrical/Computer Associate in Applied Science

#### **University of Michigan - Dearborn**

Bachelor of Science in Engineering in Electrical 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 Electrical Engineering

Engineering	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	COMP 105	√	√
	ENG 135: Business and Technical Writing	COMP 270	√	√
MTA SOCIAL SCIENCE (6 credits)		ECON 201 or ECON 202		
	BEC 151 or 152	Behavioral and Social	√	√
	Behavioral and Social Sciences Course	Sciences Course	√	√
MTA HUMANITIES & FINE ARTS (6 credits)		Humanities and Arts		
		Course		
	Humanities and Arts Course	Humanities and Arts	√,	√,
	Humanities and Arts Course	Course	<b>√</b>	<b>√</b>
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	CHEM 134	√	√
	PHYS 231: Engineering Physics I	PHYS 150	√	√
Total MTA Credits		33		
COLLEGE DEGREE REQUIREMENT				
REQUIRED COURSES	MATH 183: Calculus II	Math 116		√
	MATH 275: Discrete Math	ECE 276/MATH 275		√
	MATH 280: Calculus III	Math 215		√
	MATH 288: Diff Eq + Linear	Math 228		√
REQUIRED COURSES	PHYS 232: Engineering Physics II	PHYS 152		√
REQUIRED COURSES	ENGR 130: Intro to Engr. and ENGR 125: Intro to Computation for Engr.	ENGR 100		√
	ENGR 240: Circuits	ECE 210		√
	ENGR 232: Statics and ENGR 235: Mechanics of Materials	ME 260		√
	Total Degree Cre	dits 40		
	Total Associates Degree Cre	dits 73		



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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	3	√	
Total General Education Requirement		3		
UPPER LEVEL TECHNICAL ELECTIVES	ECE 270: Computer Methods	4		
	ECE 273: Digital Systems	4		
	ECE 311: Electronic Circuits 1	4		
	ECE 3171: Analog and Discrete Signals	4		
	ECE 3731: Microproc.& Embed. Sys	4		
	ECE 385: Elec Materials	3		
	ECE 460: Automatic Control	4		
	IMSE 317: Prob and Stat	3		√
	ENT 400: Entrepreneurial Thinking	3		
	ECE 450: Analog and Digital Comm	4		
	ECE 480: Digital Processing	4		
	ECE 4951: System Design	3		
	ECE 4981: Senior Design 1 ECE 4983: Senior Design 2	2		
	Professional Elective	2		
	Professional Elective	4		
	Technical Elective	2		
otal Major Requirement	reclinical Elective	59		
otall Credits to be Taken at UMD		62 Credits		