

Knowledge	Skills	Performance Element	
			15.0000 Engineering, General (2011)
			Technical Standards - Michigan Customized List
IV			Engineering Systems
	D		Demonstrate an understanding of and be able to use electrical and electronic engineering technologies
		1	Demonstrate the effect of resistance
		2	Apply Ohm's Law, Watt's Law, and Kirchoff's Law
		3	Identify series, parallel, and combination circuits
		4	Apply knowledge of AC and DC systems
		5	Identify the uses and types of inductors and capacitors
		6	Use appropriate electrical units to solve problems
		7	Draw a circuit diagram and lay out the circuit
		8	Identify the difference between analog and digital signals
		9	Identify electrical components and their functions
		10	Identify components of a communications system, including source, encoder, transmitter, receiver, decoder, storage, retrieval, and destination.
		11	Discuss information and communication technologies including the inputs, processes, and outputs associated with sending and receiving information.
		12	Classify information and communication systems that allow information to be transferred as human to human, human to machine, machine to human, or machine to machine.
I			ACADEMIC FOUNDATIONS
	E		Explain relevant physical properties of materials used in engineering and technology.
		1	Explain the relationships between amplitude, wavelength, frequency, period, and speed of a wave.