## Engineering : CIM Computer Integrated Manufacturing



## Grade 11/12

#	Essential Knowledge/Skill	Alignment
1	Design Process: I can identify the design process and use it to systematically approach a design problem.	
2	Engineering Notebook: I can properly and accurately maintain an engineering notebook and digital portfolio of my work.	
3	Project Management: I can manage my projects efficiently and follow through on my responsibilities with myself and within my group. (Accountability)	
4	I can utilize Vex Robotics equipment to create a robust control system to automate a task.	
5	I can create a manufacturing control system and articulate all related costs of manufacturing.	
6	I can read and write basic G and M code and machine a 2.5 axis part on the Mill	
7	I can utilize MasterCam X9 to create a CNC program to perform a complex task on the MILL to make a part.	
8	I can utilize aspects of automation to articulate and control robotic arms for pick and place operations.	
9	I can create a control system that utilizes handshaking functions between robotic arms and Vex components.	

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