

M-CAM Equivalency Matrix - Industry Recognized Credentials

Program Area: Welding Credential: AWS Sense 1																
Modules	Bay Course Credits		Grand Rapids Course Credits		Kellogg Course Credits		Lake Michigan Course Credits		Lansing Course Credits		Macomb Course Credits		Mott Course Credits		Schoolcraft Course Credits	
1 - Occupational Orientation																
3 - Drawing/Welding Symbol Interpretation	NA	2			NA	0.17	WELD 104	2					WELD164	4	WELD205	2
4 - Shielded Metal Arc Welding (SMAW)	NA	4	MN126	4	NA	9.76	WELD 102 WELD 104	3	WELD 105 WELD 110 WELD 125	10 credits for completion of modules 3, 4, 5 & 7	NA	2	WELD 166	4	WELD113	3
5 - Gas Metal Arc Welding (GMAW)	NA	4	MN202	3	NA	2.80	WELD 103 WELD 201 WELD 203	6			NA	2	WELD 170	4	WELD115	3
6 - Flux Cored Arc Welding (FCAW)													WELD 174	4		
7 - Gas Tungsten Arc Welding (GTAW)	NA	4	MN203	3	NA	5.01	WELD 202 WELD 205	3					WELD 168	4	WELD119	3

Program Area: Production Credential: MSSC																
Modules	Bay Course Credits		Grand Rapids Course Credits		Kellogg Course Credits		Lake Michigan Course Credits		Lansing Course Credits		Macomb Course Credits		Mott Course Credits		Schoolcraft Course Credits	
1 - Safety			TE272	2	NA	1.63			METS102	2	ATTR1600	2				
									Also requires OSHA 10 Certification		Also requires CPR & OSHA 10 Certification					

Program Area: Machining Credential: NIMS																		
Modules	Bay Course Credits		Grand Rapids Course Credits		Kellogg Course Credits		Lake Michigan Course Credits		Lansing Course Credits		Macomb Course Credits		Mott Course Credits		Schoolcraft Course Credits			
1 - Measurement, Materials, & Safety					NA	10.24					ATTR 1600 requires OSHA 10	2	MECH 246 & MECH 247	4	MFG 102	3		
2 - CNC Turning: Operations					NA	2.5	MACH 140	4			ATAP 1050	3						
3 - CNC Milling: Operations					NA	2.5	MACH 241	4										
4 - CNC Turning: Programming													MECH 260	4	MFG 203	3		
5 - CNC Turning: Set Up & Operations															MFG 103	3		
6 - CNC Milling: Programming																		
7 - CNC Milling: Set Up & Operations																		

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Program Area: Mechatronics & Multi-Skill Credential: PMMI																
Modules	Bay Course Credits		Grand Rapids Course Credits		Kellogg Course Credits		Lake Michigan Course Credits		Lansing Course Credits		Macomb Course Credits		Mott Course Credits		Schoolcraft Course Credits	
	1 - Fluid Power	ELEC 285	4			NA	2.31	INMT 204 INMT 205 INMT 206	6	METS 125	4	15 Credits will be awarded if all 6 certifications are completed. Courses are the same as Siemens.		MECH 130	3	ELECT 145
2 - Industrial Electricity I	ELEC 130	4	EL 144	4	NA	7.17	ELEC 100 ELEC 106 ELEC 111	11			ELEC 133			3	ELECT 137	5
3 - Programmable Logic Controllers (PLC)	ELEC 290	4	EL 164	2	NA	5.15	MANU 120 MANU 123	4			ELEC 139			6	ELECT 138	5
4 - Mechanical Components I			EL 162	2	NA	4.88	ENGY 200 ENGY 235	6	METS 110	4	ELEC 139			6	OSHA 111	2
5 - Industrial Electricity II	ELEC 135	4			NA	6.73	ELEC 151 ELEC 152	8			ELEC 236			6	ELECT 251	4
6 - Motors and Motor Control	ELEC 180	4			NA	2.24	ELEC 151 ELEC 152	8			MECH 120			2	ELECT 218	3

Program Area: Mechatronics & Multi-Skill Credential: Siemens																
Modules	Bay Course Credits		Grand Rapids Course Credits		Kellogg Course Credits		Lake Michigan Course Credits		Lansing Course Credits		Macomb Course Credits		Mott Course Credits		Schoolcraft Course Credits	
	Level 1									ELTE 108	2	MECT 1211	1	ELEC 135	6	ELECT 131
									ELTA 120	2	MECT 1212	1	ELEC 139	6	ELECT 137	5
									METS 125	4	MECT 1213	1	ELEC 155	2	ELECT 138	5
									ELTE 131	4	MECT 1214	1	MECH 120	2	ELECT 145	4
									METS 110	4	MECT 1215	1	MECH 120	3	ELECT 251	4
									METS 145	3	MECT 1216	1				
											MECT 1310	3				
											MECT 1320	3				
										MECT 1211	3					

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