

MECHATRONICS ENGINEERING TECHNOLOGY AAS DEGREE NON-CREDIT - CREDIT CROSSWALK							
Course #	Credit Course Title	Credits	Non-Credit Course Equivalent	Hours for ZTEC Course	Non-Credit Course Title	AMIST Track	Individual Course Track
MET 100	Intro to Shop Machinery	1	ZTEC 505	48	Manufacturing Processes	X	X
MET 110	Manufacturing Fundamentals	3	ZTEC 500	44	Quality Assurance	X	X
			ZTEC 262	20	Orientation to Manufacturing/Workplace Readiness	X	X
			ZTEC 238	12	Blueprint Reading	X	X
MET 120	Industrial Mechanics 1	5	ZTEC 355 OR 356 OR 325+327	162	AMIST Industrial Mechanical Program	X	
			or				
			ZTEC 311	35	Mechanical Drives 1		X
			ZTEC 312	35	Mechanical Drives 2		X
			ZTEC 300	20	Basic Hydraulics		X
			ZTEC 301	25	Intermediate Hydraulics		X
			ZTEC 305	16	Basic Pneumatics		X
			ZTEC 306	15	Intermediate Pneumatics		X
			ZTEC 324	4	Pneumatic Construction		X
			ZTEC 310	35	Piping Systems		X
			ZTEC 308	45	Hydraulic Troubleshooting		X
MET 130	Industrial Electrical Systems	4	ZTEC 226 OR 227 OR 213+326	120	AMIST Industrial Electrical Program	X	
			or				
			ZTEC 205	30	AC/DCElectrical Learning System		X
			ZTEC 207	50	Electric Motor Control System		X
			ZTEC 303	40	Electro-Fluid Power System		X
			ZTEC 304	8	Electronic Sensors		X
			ZTEC 209	10	Electrical Control Wiring Systems		X
			ZTEC 232	8	Commercial/Residential Wiring		X
			ZTEC 210	25	Electrical Power Distribution		X
MET 140	Introduction to PLCs	4	ZTEC 427 OR 428 OR 418+423	60	Programmable Logix Controller AB SLC500	X	
			or				
			ZTEC 402	60	Intro to Programmable Logix Controller AB SLC500		X
			ZTEC 403	15	Analog Application System AB SLC500	X	X
			ZTEC 404	10	Data Highway 485 System AB SLC500	X	X
			ZTEC 405	15	Panelview Operator DH-485 System w/ Keypad AB SLC500	X	X

MET 150	Industrial Mechanics II	6					
			ZTEC 364	10	Spur Gear & Multiple Shaft Drives Mechanical Drive Belts, Couplings, Shaft Alignment &	X	
			ZTEC 365	20	Lubrication	X	
			ZTEC 313	35	Mechanical Drives 3	X	X
			ZTEC 314	20	Mechanical Drives 4	X	X
			ZTEC 315	4	Floor Standing Conveyors	X	X
			ZTEC 316	12	Vibration Analysis	X	X
			ZTEC 317	8	Laser Alignment	X	X
			ZTEC 318	20	Central Lubrication	X	X
			ZTEC 366	10	Pneumatic DVC's & Air Logic	X	
			ZTEC 307	15	Advanced Pneumatics	X	X
			ZTEC 309	35	Pneumatic Troubleshooting	X	X
MET 160	Rotating Electrical Machines	4	ZTEC 206	32	Basic Electrical Machines System	X	X
			ZTEC 208	50	Advanced Electric Motor Controls	X	X
			ZTEC 401	30	DC Electronic Drives	X	X
			ZTEC 400	25	AC Electronic Drives	X	X
MET 200	Robotics & Motion Control	4	ZTEC 509	50	Automated Material Handling	X	X
			ZTEC 510	50	Flexible Manufacturing Systems	X	X
			ZTEC 520	30	General Purpose Multi-axis Motion Control (need to create) - 30 hrs	X	X
					*OMAC Packaging Workgroup "Guidelines for Packaging Machinery Automation		
					*General Purpose Motion Control (TBD)		
			ZTEC 521	10	*Use Yaskawa, Elan Busch-Rayvath, Bankoff or B&R equipment - 10 hrs	X	X
MET 210	Process Control & Instrumentation	3	ZTEC 416	60	Process Control	X	X
			ZTEC 417	60	Thermal Process Control	X	X
MET 220	Advanced PLCs AB Control Log	4	ZTEC 406	60	PLC Control Logix 5500 Basic Controller Functions	X	X
			ZTEC 407	20	Analog Application System	X	X
			ZTEC 408	15	Panelview Plus System	X	X
			ZTEC 430	15	Control Networking	X	X
			ZTEC 411	15	Ethernet Supervisory Networking	X	X
			ZTEC 431	12	Advanced Controller Functions, Real Time Considerations, Language Standards and Integrated Motion	X	X
MET 230	Integrated Manufacturing Systems	3	ZTEC 511	60	CIM - Learning System	X	X
			ZTEC 512	25	CIM - Production & Management	X	X
			ZTEC 513	25	CIM - EtherNet Communications	X	X
MET 240	Mechatronics Application Project	4	ZTEC 522	120	Customized Projects	X	X
	Total Credits	45					