MORAINE PARK TECHNICAL COLLEGE

Process Engineering Technology - Academic Planner

Industrial/Manufacturing Emphasis or Quality Assurance Emphasis

Associate of Applied Science Degree: 10-623-8

Campus: Fond du Lac (some courses also available at the West Bend campus)

Curriculum for 2013-2014

11/1/2012

Program Advisor: _____

Entrance Assessment Scores Assessment Areas	ACT	Accuplacer
English/Sentence Skills	18	76
Reading/Reading Comprehension	16	67
Math/Arithmetic	18	79

✓	T/G	Course Subj	Course Num	Title	Hours / Week Lec	Lab	Other	Total Hours	Credits	Prerequisites and/or Corequisites	Typically Offered S	F	SP	Comments
				Term 1:							S	F	SP	
				New Program Students: Attend New Student Orientation and Your Priority Registration Session										
		103	159	**Computer Literacy - Microsoft Office		2		36	1		x	x	x	**Institutional Requirement. May be eligible for Advanced Standing.
	T	606	176	CAD 2-D, AutoCAD	2	2		72	3			x	x	No previous computer experience is required, but a background in fundamental blueprint reading and/or drafting skills is recommended.
	T	606	170	CAD 3-D, NX (Unigraphics) **(or)**	2	2		72	3			x	x	Previous drafting experience or course and previous work on computers (Microsoft products such as Word, Excel, etc.) is recommended
	T	617	112	CAD 3-D, Pro-Engineer **(or)**								x	x	Previous drafting experience or course and previous work on computers (Microsoft products such as Word, Excel, etc.) is recommended
	T	617	114	CAD 3-D, SolidWorks							x	x	x	Previous drafting experience or course and previous work on computers (Microsoft products such as Word, Excel, etc.) is recommended
	T	623	162	Manufacturing Processes	2	2		72	3			x	x	
	G	801	136	English Composition 1	3			54	3		x	x	x	
	G	804	113	College Technical Math 1A	3			54	3		x	x	x	
		890	101	**College 101	2			36	2		x	x	x	**Institutional Requirement
				Total 1st Term Credits					**18**					
				Term 2:							S	F	SP	
	T	617	115	Jig and Fixture Design	1	4		90	3	Completion of or concurrent enrollment in 617-114 CAD 3-D, SolidWorks			x	
	T	623	190	Basic Metrology	2	2		72	3				x	
	T	628	136	Statistical Process Control	2	2		72	3	103-159 Computer Literacy; 890-101 College 101			x	Recommended completion of 804-113 College Tech Math 1A or proficient in performing mathematical computations prior to taking this course
	G	801	196	Oral and Interpersonal Communication **(or)**	3			54	3		x	x	x	
	G	801	197	Technical Reporting						801-136 English Composition 1		x	x	
	G	804	114	College Technical Math 1B	2			36	2	804-113 College Technical Math 1A	x	x	x	
	G	809	166	Introduction to Ethics: Theory and Application	3			54	3	801-136 English Composition 1	x	x	x	
				Total 2nd Term Credits					**17**					

✓	T/G	Course Subj	Course Num	Title	Hours / Week Lec	Lab	Other	Total Hours	Credits	Prerequisites and/or Corequisites	Typically Offered S	F	SP	Comments
				Term 3:										
	T	623	118	Gage Calibration, Repeatability and Reproducibility **(or)**	2	2		72	3	623-190 Basic Metrology; 628-136 Statistical Process Control		x		
	T	628	122	Basic CNC Programming and Operation						103-159 Computer Literacy - Microsoft Office; Completion of or concurrent enrollment in 623-162 Manufacturing Processes or dean consent		x		
	T	623	151	Lean Manufacturing	2	2		72	3	623-162 Manufacturing Processes or dean consent		x		
	T	623	170	Process Planning	1	2		54	2	623-162 Manufacturing Processes		x		
	T	623	196	Geometric Dimensioning and Tolerancing	2	2		72	3	804-113 College Technical Math 1A		x		A print reading background is recommended.
	T	628	110	Integrated Manufacturing Planning - Process Engineering Technology	0	4		72	2	623-162 Manufacturing Processes		x		
	G	806	137	Comprehensive Technical Physics	3	2		90	4	804-107 College Mathematics or 804-114 College Technical Math 1B		x	x	
				Total 3rd Term Credits					**17**					
				Term 4: Industrial Manufacturing Emphasis							**S**	**F**	**SP**	
				Apply for Graduation (which includes a $30 graduation fee)										
	T	628	111	Integrated Manufacturing Production - Process Engineering Technology*	0	4		72	2	628-110 Integrated Manufacturing Planning - Process Engineering Technology			x	
	T	628	132	Advanced CNC Programming and Operation	2	2		72	3				x	It is recommended students have taken 628-122 Basic CNC Programming and Operation or have industry experience in programming and setup of CNC machines using G-code programming, or dean consent
	T	628	133	Robotics and Automated Material Handling	2	2		72	3				x	Recommended completion of 628-122 Basic CNC Programming & Operation, or background in working with automated equipment
	T	628	142	Computer-Aided Manufacturing	2	2		72	3	628-122 Basic CNC Programming and Operation; 606-176 CAD 2-D, AutoCAD or dean consent			x	
	G	809	195	Economics	3			54	3	801-136 English Composition 1	x	x	x	
	G	809	198	Introduction to Psychology **(or)**	3			54	3		x	x	x	
	G	809	199	Psychology of Human Relations							x	x	x	
				Total 4th Term Credits					**17**					
			OR	**Term 4: Quality Assurance Emphasis**							**S**	**F**	**SP**	
				Apply for Graduation (which includes a $30 graduation fee)										
	T	623	106	Quality Tools	2	2		72	3				x	
	T	623	134	Basic CMM Programming and Operation	1	4		90	3				x	It is recommended that students have a background in print reading.
	T	623	167	ISO 9000/2000 and Auditing	2	2		72	3				x	
	T	628	111	Integrated Manufacturing Production - Process Engineering Technology *	0	4		72	2	628-110 Integrated Manufacturing Planning - Process Engineering Technology			x	
	G	809	195	Economics	3			54	3	801-136 English Composition 1	x	x	x	
	G	809	198	Introduction to Psychology **(or)**	3			54	3		x	x	x	
	G	809	199	Psychology of Human Relations							x	x	x	
				Total 4th Term Credits					**17**					
				Additional Credits of Electives Required					3					
				Total Program Credits and Institutional Requirements					**72**					
				****The credits for 103-159 Computer Literacy-Microsoft Office and 890-101 College 101 are Institutional Requirements for graduation. Consequently, they are not part of the program credit requirements.**										
				***Completion of SME Certified Manufacturing Technologist Practice Exam is a graduation requirement for the program.**										

T/G: T - Technical Studies course; G - General Studies course

Semester Codes: S-Summer; F-Fall; SP-Spring

Curriculum and program acceptance requirements are subject to change.

If Student Success Center or General College courses (ie: 831-103 Intro to College Writing, 838-104 Intro to College Reading, 834-109 Pre-Algebra) are required based on college placement; or if the student elects part-time enrollment, the time required to complete the program will increase.

For a complete list of course descriptions for this program, please consult the College Catalog at http://www.morainepark.edu/MPTCCatalog.

Suggested Elective: _____

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