MODEL ROUTE											
School:	School of Engineering Technology & Applied Sciences - AMAT	Program Number:	3748								
Program Title:	Mechanical Engineering Technology - Industrial (PTY)	Credential:	☐ Certific☐ Diplom☐ Degree	na	_	☐ Graduate Certificate ☐ Advanced Diploma					
Delivery Mode:	☐ Non Co-Op ☑ Co-Op ☑ Fast Track	Duration:	☐ 4 Semesters ✓ 6		✓ 6 Sem	3 Semesters 6 Semesters 9 Semesters					
Intake:	Fall 2021 & Winter 2022										
Course Code	Course Title	Pre-Requisite (Course Code)	Lab Hours	Lecture Hours	Total Weekly Hours	Weeks (14)	Total Hours				
Semester 3	Fall 2021 & Winter 2022										
MT-103	Machine Shop		3	1	4	14	56				
MT-201	CAD/CAM and CNC Programming		4	0	4	14	56				
MT-318 *	Fluid Mechanics 1		1	3	4	14	56				
MATH-231 *	Diff. Calc. & Analyt. Geometry		0	4	4	14	56				
MT-153	CAD II		4	0	4	14	56				
COMM-170/171	College Communications 2		0	3	3	14	42				
						Total	322				
Semester 4		Winter 2022 & Summ									
MT-224 *	Applied Dynamics	MT-121	0	4	4	14	56				
MT-225	Hydraulics & Pneumatics		2	2	4	14	56				
MT-228	Tool Design	MT-153	2	2	4	14	56				
MT-257	Quality Assurance		1	2	3	14	42				
MATH-232	Integral Calculus	MATH-231	0	4	4	14	56				
GNED-500	Global Citizenship: From Social Analysis to Social Action		0	3	3	14	42				
ENGL-250	Report Writing in a Technical Environment	COMM-170/171	0	2	2	14	28				
						Total	336				
Semester 5		Fall 2022			ı						
MT-258	Project: Design & Construction	MT-153 & MT-204 or FT Code	4	0	4	14	56				
MT-335	Machine Design 1	MT-204 or FT Code	0	4	4	14	56				
MTID-311 <b>♦</b>	Operational Excellence		0	4	4	14	56				
MTID-312 ◆	Advanced Quality Concepts	MATH-316	2	2	4	14	56				
MTID-313 <b>♦</b>	Project Management		0	4	4	14	56				
COOP-221	Employment Preplacement	Minimum C-grade in COMM 170/171, minimum CGPA. & minimum of Year 1 & 2 courses required for COOP-221 & subsequent PTY work- placements	0	1	1	14	14				
						Total	294				
COOP-222	Professional Technology Year										
COOP-331	Professional Technology Year										
Semester 6		Winter 2024									
MT-324	Advanced Project: Design & Construction	MT-258	6	0	6	14	84				
MTID-321	Shop Floor Mgmt & Continuous Improvement	MTID-311	2	2	4	14	56				

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Program Title:	Mechanical Engineering Technology - Industrial (PTY)	Credential:				duate Certificate anced Diploma					
Delivery Mode:	☐ Non Co-Op ☑ Co-Op ☑ Fast Track	Duration:	2 Semesters 4 Semesters 8 Semesters		☐ 3 Sen ☑ 6 Sen ☐ 9 Sen						
Intake:	Fall 2021 & Winter 2022										
Course Code	Course Title	Pre-Requisite (Course Code)	Lab Hours	Lecture Hours	Total Weekly Hours	Weeks (14)	Total Hours				
MTID-322	Manufacturing Automation	MT-256 & MT-225	2	2	4	14	56				
MTID-323	Facility Planning & Workcell Design	MTID 311 & (MT-151 or MT-106)	2	2	4	14	56				
MTID-324 <b>♦</b>	Principles of Accounting & Financial Management	MTID 313	0	4	4	14	56				
Total											
Total Program Hours:											
Notes:											
Minimum Program	GPA of 2.00 is required for graduation										
♦ This course may	be offered in one of the following modalit	ies: Online, Hybrid, or Blended									
* Minimum C grade required for Technologist graduation											
Signature:	Donald Wang										
	AMAT Chair		Revised Date								