

# COURSE SYLLABUS

Course Title:	Intermediate Machine Technology		Date submitted:	May 2019 (AAC: 19-25)	
Department:	Advanced Manufacturing Technology				
Curriculum:	Technology Studies				
Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.	Course Code: (eg. ACC 101)	MFG*165	Prerequisites:		
	Course Type:	X			
	A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture N: Internship M: Seminar P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/ Clinical/Lab Z: Combined Lecture/Studio			Introduction to Machine Technology (MFG*150)	
	Elective Type:	G			
	AH: Art History E: English FA: Fine Arts FL: Foreign Language G: General HI: History HU: Humanities LAS: Liberal Arts & Sciences M: Math S: Science SS: Social Science			Corequisites:	
	Credit Hours:	3			
	Developmental: (yes/no)	No	None		
	Lecture:	2			
	Clinical:	0			
	Lab:	1			
Studio	0				
Other:	0				
Contact Hours:	TOTAL:	3	Other Requirements:		
Class Maximum:	24				
Semesters Offered:	Fall, Spring	None			
Catalog Course Description:	Intermediate Machine Technology provides the student an in-depth exposure to the lathe and milling manual operations. Students will perform lathe operations consisting of center alignment, facing, center-drilling, chuck turning, turning between centers, boring, reaming, tapping, grooving, tapers, knurling, and threading. Vertical and Horizontal Milling Operations will include an introduction to the Offset Boring Head, Side Milling Cutters, and Face Milling Cutters.				
Topical Outline: List course content in outline format.	[The outline should be in title case and use the numbering format below. You may not have subtopics, but if you do, here is the format.]  1. Lathe Operations: Turning Between Centers				

	<ol style="list-style-type: none"> <li>2. Lathe Turning Operations: Alignment of Centers</li> <li>3. Lathe Turning Operations: Drilling Boring, Reaming &amp; Tapping</li> <li>4. Lathe Turning Operations: Cutting Threads</li> <li>5. Vertical Milling: Boring Head &amp; Projects</li> <li>6. Horizontal Milling Side &amp; Face Milling Cutters &amp; Projects</li> </ol>
<p>Outcomes: Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.</p>	<p>Upon successful completion of this course, the student will be able to do the following:</p> <p>COURSE: Abilities should start with a measurable verb that students do. You do not need any punctuation at the end. Examples of some verbs you could use follow and more can be found at <a href="http://online.bcit.ca/guidelines/step2/Outclass.htm">http://online.bcit.ca/guidelines/step2/Outclass.htm</a> (Note: The examples below are cognitive abilities. See the website for others.)</p> <ol style="list-style-type: none"> <li>1. Demonstrate an understanding of the fundamentals of Lathe Operations.</li> <li>2. Demonstrate an understanding of the fundamentals of Vertical Milling.</li> <li>3. Demonstrate an understanding of the fundamentals of Horizontal Milling.</li> </ol>
	<p>PROGRAM: <i>Electronics Technology Certificate and A.S. Degree</i></p> <p>[Any Program Abilities should be cut and pasted here as they appear in the current catalog, including numbers. Please note that MSWord may have numbered these automatically, so when you cut and paste, make sure the numbers are correct – you will need to make them “hard” numbers rather than auto numbers.]</p> <ol style="list-style-type: none"> <li>1. Demonstrate an understanding of Shop Safety.</li> <li>2. Demonstrate an understanding the theory of electrical structure, voltage, current, resistance, and electrical circuit and their measurement.</li> <li>3. Demonstrate an understanding of the basic laws of arithmetic.</li> <li>4. Demonstrate an understanding of several number systems and codes that are the foundation of digital theory and digital applications.</li> <li>5. Make comparisons with personal computers; as well as, develop an understanding of its origin and growth since conception.</li> <li>6. Demonstrate an understanding of the fundamentals of Automated Manufacturing systems.</li> </ol>
	<p>GENERAL EDUCATION: <i>(Numbering reflects General Education Outcomes as they appear in the college catalog)</i></p> <p>[Select the General Education Abilities from the listing below.]</p> <p>No General Education outcomes.</p>
<p>Evaluation: List how the above outcomes will be assessed.</p>	<p>Assessment will be based on the following criteria:</p> <ol style="list-style-type: none"> <li>1. Quizzes</li> <li>2. Exams</li> <li>3. Projects</li> </ol>

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<p>Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.</p>	<p>Required: Full manufacturing machine lab including basic metal machining equipment (lathe, miller, drill press, saw, and grinding wheels), vertical and horizontal mills, and all necessary accessories.</p> <p>Desired: None</p>
<p>Textbook(s)</p>	<p>None</p>