

# COURSE SYLLABUS

Course Title:	Electro-Mechanical Seminar/Internship	Date submitted:	4/30/2018 (18-49)
Department:	Advanced Manufacturing Technology		
Curriculum:	Technology Studies		
<p>Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.</p>	Course Code: (eg. ACC 101)	MFG*164	<p>Prerequisites:</p> <p>Successful completion of Electronics Technology Certificate or by permission of the director of Manufacturing Technology.</p> <p>Corequisites:</p> <p>None</p> <p>Other Requirements:</p> <p>None</p>
	Course Type:	N	
	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		
	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		
	Credit Hours:	4	
	Developmental: (yes/no)	No	
	Lecture:	0	
	Clinical:	0	
	Lab:	0	
	Studio	0	
	Other:	4	
TOTAL:	4		
Class Maximum:	24		
Semesters Offered:	Fall, Spring		
Ability Based Education (ABE) Statement	<p>At Tunxis Community College students are assessed on the knowledge and skills they have learned. The faculty identified the General Education Abilities critical to students' success in their professional and personal lives. In every class, students are assessed on course abilities, sometimes program abilities, and, in most classes, at least one General Education Ability. Students will receive an evaluation of the degree to which they have demonstrated or not demonstrated that General Education Ability.</p>		

<p>Catalog Course Description:</p>	<p>The Electro/Mechanical Internship is designed to be a capstone activity. The student is required to have completed successfully both electronic certificate programs, Manufacturing Electronics Fundamentals &amp; Manufacturing Electronics System &amp; Controllers, and to be in the latter stage of their Electro/ Mechanical Certificate Program. The internship will commence within the last four [4] weeks of the Electro/ Mechanical Certificate semester, will require forty-five [45] hours of Electro/Mechanical Industrial Maintenance &amp; Repair supervised activity. Regional manufactures will provide the student with on-site laboratory activities in regular maintenance and in repair. The student will be required to troubleshoot CNC mill, lathe and other electronically driven equipment in need of repair under the direct supervision of qualified company staff. Time will be provided in Pneumatics &amp; Hydraulics, Industrial Maintenance, and CNC Maintenance &amp; Repair to discuss, to review, and to reinforce the troubleshooting and maintenance experiences learned at the work site.</p>
<p>Topical Outline: List course content in outline format.</p>	<p>[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.]</p> <ol style="list-style-type: none"> <li>1. Work site activities designed to learn industrial maintenance &amp; repair in an industrial setting.</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 the ability to discern the cause[s] of a CNC equipment failure by utilizing troubleshooting techniques learned in the classroom.</li> <li>2. Demonstrate the ability to safely operate CNC equipment.</li> <li>3. Demonstrate the ability to utilize all necessary CNC systems to identify the problem causing equipment failure.</li> <li>4. Demonstrate the ability to establish a plan of action to bring the failed equipment on line.</li> <li>5. Demonstrate positive work habits including punctuality, good attendance, time management, acceptance of direction, and self-sufficiency.</li> </ol> <p>PROGRAM: <i>Manufacturing Electro-Mechanical Maintenance 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 industrial manufacturing machinery and equipment.</li> <li>3. Demonstrate an understanding of industrial machine maintenance.</li> <li>4. Demonstrate an ability to troubleshoot industrial machinery.</li> <li>5. Demonstrate and ability to repair industrial machinery.</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. Employer assessment, as appropriate</li> <li>2. Performance-based assessments</li> <li>3. Written report on internship experience</li> </ol>
<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: Manufacturing lab</p> <p>Desired:</p>
<p>Textbook(s)</p>	<p>None</p>