



# Computerized Manufacturing & Machining

## CNC Machinist Semester Plan

FIRST YEAR COURSE SCHEDULE					
	Fall Semester	Credits		Spring Semester	Credits
	^CMM 114-Fundamentals of Machine Tools	6		^CMM 124-Applied Machining	6
	^MAT 116-Technical Mathematics or Higher	3		^CMM 134-Manual Programming CAD/CAM/CNC	6
	^BRX 112-Blueprint Reading for Machinist	4		Computer/Digital Literacy Course <sup>3</sup>	3
	^CMM 118-Metrology/Control Charts	2			
<b>Total Credit Hours</b>		<b>15</b>	<b>Total Credit Hours</b>		<b>15</b>

SECOND YEAR COURSE SCHEDULE					
	Fall Semester	Credits		Spring Semester	Credits
	^CMM 214-Industrial Machining	6		CMM 224Advanced Industrial Machining	6
	General Education <sup>2</sup>	3		Elective <sup>4</sup>	1
	^CMM 230-Conversational Programming (CNC Machinist) <sup>1</sup>	6		^CMM 240-Intro to 3D Printing (CNC Machinist)	6
<b>Total Credit Hours CNC Machinist</b>		<b>15</b>	<b>Total Credit Hours</b>		<b>13</b>
<b>Total Credit Hours Machinist</b>		<b>9</b>			
				<b>Total Credit Hours for CNC Machinist Diploma</b>	<b>56-59</b>
				<b>Total Credit Hours for Machinist Diploma</b>	<b>41-47</b>

Completion of Diploma or Additional Requirements for AAS/GOTS Degree			
	Credits		Credits
<b>General Education Component</b>		<b>Technical Component</b>	
^MAT 116-Technical Mathematics <b>OR</b> Higher Quantitative Reasoning	3	Technical Core**	34-40
Natural Sciences	3	<b>Total Credits for Degree (including General Education)</b>	<b>58-64</b>
Social/Behavioral Sciences	3	Note: *Please refer to course catalog for complete listing of required Technical Courses. ** The student must have a plan of study on file in the academic affairs office. *** A combination of general education and technical courses should not exceed 68 credits.	
Heritage/Humanities	3		
ENG 101-Writing I	3		
<b>Subtotal</b>	<b>15</b>		

Curriculum within KCTCS is reviewed and updated to ensure quality and relevance. This curriculum plan should be used only as a guide for meeting the course requirements for each credential. See the KCTCS catalog for specifics and consult your advisor.

**Note: Credit earned through certificate and diploma program/completion will be applicable toward the Associate of Applied Science in General Occupational/Technical Studies degree when consistent with the objectives of the student's individual plan of study.**

**^Indicates possible course substitutions**

- ^BRX 110 & 210 may be substituted for BRX 112
- ^CMM 110 & 112 may be substituted for CMM 114
- ^CMM 120 & 122 may be substituted for CMM 124
- ^CMM 210 & 212 may be substituted form CMM 214
- ^CMM 220 & 222 may be substituted for CMM 224
- ^MAT 126 – Technical Algebra & Trigonometry or higher may be substituted for MAT 116
- ^CMM 130 may be substituted for 134 (Machinist Only)
- ^CMM 130 & 132 may be substituted for CMM 134 (CNC Machinist Only)
- ^CMM 2301 & 2302 may be substituted for CMM 230 (CNC Machinist Only)
- ^CMM 2401 & 2402 may be substituted for CMM 240 (CNC Machinist Only)

<sup>1</sup>Only those following the CNC Machinist plan will need this course. \*Please note that this plan follows two diploma options (CNC Machinist and Machinist) under the Computerized Manufacturing & Machining program. When a course is required for one area but not the other it will be noted in ( ) indicating the required area.

<sup>2</sup>Both CNC Machinist & Machinist are required to have a general education course from the following area:

AREA 1: (written communication, oral communication, or heritage/humanities). Please see our advisor for a list of approved courses.

<sup>3</sup>Computer/Digital Literacy must be demonstrated either by competency exam or by completing a computer/digital literacy course.

<sup>4</sup>Electives\* CNC Machinist are required to take a minimum of 1 credit hour of general education or technical elective. Machinist is required to take a Co-op or Practicum with a minimum requirement of 1 credit hour. Please check with your advisor for an approved course.

Students must achieve a minimum grade of "C" in each technical Course.