

ANOKA TECHNICAL COLLEGE

MACHINE TRADES SEMESTER PLANNING FORM

PART TIME CNC SERVICE TECHNICIAN DIPLOMA

CREDITS NEEDED = 64

Course Number	Course Title	Credits	Contact Hours/week		Hours/week
			Lec	+	Lab
1st Semester					
<u>ETEC1250 Digital I</u>	Prereq. None	3	2	+	2
<u>MAIN1100 Pneumatics & Hydraulics</u>	Prereq. None	4	1	+	6
		Total Credits	7 credits		
		Total Hours	11 hours/week		
2nd Semester					
<u>MACH1105 Basic Machining</u>	Prereq. None	3	1	+	4
<u>MACH1261 CNC PROGRAMMING I</u>	Prereq. MACH 1171 or MAIN 1100	3	3	+	0
<u>MACH1221 Grinding</u>	Prereq. MACH 1111, 1122 or MAIN 1100	2	1	+	2
		Total Credits	8 credits		
		Total Hours	11 hours/week		
3rd Semester					
<u>ETEC1102 Mechatronic 1 DC</u>	Coreq. ETEC 1113, 1141	3	2	+	2
<u>ETEC1113 Mechatronic 2 AC</u>	Coreq. ETEC 1102	3	2	+	2
<u>ETEC1141 Circuit Analysis</u>	Coreq. ETEC 1102	4	4	+	0
		Total Credits	10 credits		
		Total Hours	12 hours/week		
4TH Semester					
<u>ETEC1170 Programmable Logic Controllers</u>	Prereq. ETEC 1250	2	2	+	0
<u>ETEC1202 Solid State Electronic Devices</u>	Prereq. ETEC 1113	5	4	+	2
		Total Credits	7 credits		
		Total Hours	8 hours/week		
5TH Semester					
<u>MAIN2330 Power Transmission</u>	Prereq. MAIN 1100	4	1	+	6
<u>MAIN2340 Controls</u>	Prereq. ETEC 1250, 1113 MACH 1261	3	1	+	4
		Total Credits	7 credits		
		Total Hours	12 hours/week		
6TH Semester					
<u>MAIN2410 Preventative Maintenance</u>	Prereq. None	2	1	+	2
<u>MAIN2430 Accuracies</u>	Prereq. MAIN 2330	3	1	+	4
<u>ENGL2105 Business and Technical Writing</u>	Prereq. ENGL 0102 or 0960 and READ 900 or 960 or 78 on Accuplacer or appropriate test score	4	4	+	0
		Total Credits	9 credits		
		Total Hours	12 hours/week		
7TH Semester					
<u>MAIN2310 Peripheral Machine Systems</u>	Prereq. MAIN 1100 ETEC 1250, 1113	2	1	+	2
<u>MAIN2320 Electric Motors and Sensors</u>	Prereq. ETEC 1250, 1113	3	1	+	4
<u>MACH1251 CNC Machining</u>	Prereq. MACH 1111, 1116, 1122, 1132 or MACH 1105	3	1	+	4
		Total Credits	8 credits		
		Total Hours	13 hours/week		
8TH Semester					
<u>MAIN2400 Service/Machine Troubleshooting</u>	Prereq. MAIN 2310, 2320, 2330, 2340 MACH 1251	5	1	+	10
<u>MAIN2420 Electrical Troubleshooting</u>	Prereq. MAIN 2310, 2320, 2330, 2340 MACH 1251	3	1	+	4
		Total Credits	8 credits		
		Total Hours	16 hours/week		