

Industrial Maintenance Technology Certificate (Code 918)				Welding Certificate (Code 931)				Tooling & Manufacturing Certificate (Code 920)				Industrial Technology Certificates (Code 919)											
												CAD				Electricity				Manufacturing			
Course	Course Name	CR	CH	Course	Course Name	CR	CH	Course	Course Name	CR	CH	Course	Course Name	CR	CH	Course	Course Name	CR	CH	Course	Course Name	CR	CH
TE 103	Technical Mathematics OR	4	4	EG 110	Industrial Graphics with CAD	3	6	MN 213	Machinery Handbook	2	2	TE 103	Technical Mathematics	4	4	TE 103	Technical Mathematics	4	4	TE 103	Technical Mathematics	4	4
EL 132	Electronics Mathematics	5	5	MN 134*	Oxyacetylene Welding	3	4	EG 110	Industrial Graphics with CAD	3	6	MN 114	Basic Blueprint Reading AND	2	2.25	EL 101	Basic Electrical Skills	2	3	MN 114	Basic Blueprint Reading	2	2.25
MN 114	Basic Blueprint Reading	2	2.25	MN 136*	Basic Arc Welding	4	8	MN 252	Geometric Tolerancing	2	2	MN 214	Adv. Blueprint Reading OR	2	2.25	EL 144	Basic Electricity & Electronics	3	6	MN 116	Basic Welding	2	4
MN 119	Introduction to Machine Operations	4	8	TE 103	Technical Mathematics	4	4	MN 116	Basic Welding	2	4	EG 110	Industrial Graphics with CAD	3	6	EL 201	Industrial Electricity	3	6	MN 119	Introduction to Machine Operations	4	8
MN 116	Basic Welding	2	4	TE 104	Adv. Technical Mathematics	3	3	MN 234	Metallurgy	3	4	MN 119	Introduction to Machine Operations	4	8	EL 162	Control Systems	2	3	MN 217	Hydraulics OR	4	6
EL 144	Basic Electricity & Electronics	3	6	EL 164	Programmable Logic Controllers	2	3	MN 119	Introduction to Machine Operations	4	8	MN 116	Basic Welding	2	4	EL 163	Electrical Troubleshooting	2	2	MN 218	Pneumatics	3	4
EL 201	Industrial Electricity	3	6	MN 230*	Fundamentals of TIG and MIG Welding	4	8	MN 249	Statistical Process Control	3	3	DR 228	Introduction to CAD	3	4	EL 164	Programmable Logic Controllers	2	3	DR 228	Introduction to CAD	3	4
MN 217	Hydraulics	4	6	MN 231*	Welding, Fabrication, Design, & Testing	4	8	MN 235	CNC & NC Machine Programming	3	4	DR 250	Introduction to Mechanical Desktop OR	3	4	BA 102	Business and Technical English	3	3	EL 101	Basic Electrical Skills OR	2	3
MN 218	Pneumatics	3	4	MN 234	Metallurgy	3	3	TE 103	Technical Mathematics OR	4	4	DR 258	Introduction to ProEngineering	4	4		Elective	9	"	EL 164	Programmable Logic Controllers	2	3
	Electives	6	"					MA 107	Intermediate Algebra	4	4	DR 150	Introduction to SolidWorks	3	3					EL 164	Programmable Logic Controllers	2	3
								TE 104	Adv. Technical Mathematics OR	3	3	BA 102	Business and Technical English	3	3					MN 136	Basic Arc Welding OR	4	8
								MA108	Trigonometry	2	2									MN 230	Fundamentals of TIG and MIG Welding	4	8
																				BA 102	Business and Technical English	3	3
																					Elective	3	"
Total Credits		31	50	Total Credits		30	47	Total Credits		30	45	Total Credits		30	36	Total Credits		30	40	Total Credits		31	43
Apprx Cost:\$9,050				Apprx Cost:\$8,507				Apprx Cost:\$8,145				Apprx Cost:\$6,516				Apprx Cost:\$7,240				Apprx Cost:\$7,783			

The above scheduling is presented as a guide. Students should be advised by GRCC M-TEC instructors only to ensure certificate requirements. Electives may be chosen from the following departments: AP, AR, CM, CO, DR, EL, ER, EG, MA, MN, PC, PH TE, TI, TR

Approximate cost listed, per program, refers only to tuition (fees and textbooks are not included) and is for the 2009/2010 school year. Out-of-District: \$181.00 per contact hour. In-District \$84.50 per contact hour. All credits earned may be applied towards an Associated Degree Program.