



**Manufacturing Maintenance Technician Diploma
Program Course Requirements
2010-2011**
revised 3/29/10

Student Name _____ **Student ID#** _____

Course #	Course Title	Credits	Lecture Hrs	Lab Hrs
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REQUIRED COURSES

___ MDFT 1110	Intro to Parametric Modeling	2	1	2
___ MTRD 1160	CNC Setup and Operation	4	0	10
___ MTRD 1215	Intro to Milling Operations	3	1	4
___ MTRD 1221	Intro to Lathe Operations	2	0	4
___ MTRD 2221	CNC Milling Operations	5	1	8
___ MTRD 2223	CNC Turning Operations	2	1	4
___ MTRD 2160	CAD/CAM	3	3	0
___ MTRD 2162	Workholding and Fixturing	3	1	4
___ RAST 1101	Industrial Electronics I	3	3	0
___ RAST 1102*	Industrial Electronics II	3	3	0
___ RAST 1103*	Motors and Drives	3	3	0
___ RAST 1104	Introduction to Robotics	2	1	2
___ RAST 1109	Computers in Industry	2	1	2
___ RAST 1110	Intro to Manufacturing	2	2	0
___ RAST 1111	Industrial Electronics Lab I	3	0	6
___ RAST 1113*	Motors & Drives Lab	3	0	6
___ RAST 1206*	Programmable Logic Controllers	3	1	4
___ RAST 1212*	Industrial Electronics Lab II	2	0	4
___ RAST 2106*	Industrial Electronics III	2	2	0
___ RAST 2116	Industrial Electronics Lab III	2	0	4
	Total	54		

GENERAL EDUCATION

Required:

___ MATH 1500	Applied Mathematics	3	3	0
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Department Recommendation:

___ CCST 1530	Employment Strategies	3	3	0
	Total	6		

ELECTIVES

Total	4
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GRADUATION REQUIREMENT **64**

*Denotes Prerequisites

In order to receive a degree, diploma, or certificate from Central Lakes College, students must complete one-third of their credits at Central Lakes College. For programs exceeding 60 credits, a maximum of 20 semester credits must be completed at Central Lakes College.

Evaluator _____ **Date** _____



A COMMUNITY & TECHNICAL COLLEGE

Manufacturing Maintenance Technician Diploma Program Course Requirements 2010-2011

Course #	Course Title	Credits	Lecture Hrs	Lab Hrs
<u>FIRST YEAR</u>				
MATH 1500	Applied Mathematics	3	3	0
MDFT 1110	Intro to Parametric Modeling	2	1	2
MTRD 1160	CNC Setup and Operation	4	0	10
MTRD 1215	Intro to Milling Operations	3	1	4
MTRD 1221	Intro to Lathe Operations	2	0	4
RAST 1110	Intro to Manufacturing	2	2	0
	Total	16		
<u>SECOND SEMESTER</u>				
MTRD 2160	CAD/CAM	3	3	0
MTRD 2162	Workholding and Fixturing	3	1	4
MTRD 2221	CNC Milling Operations	5	1	8
MTRD 2223	CNC Turning Operations	2	1	4
RAST 1109	Computers in Industry	2	1	2
	Total	15		
<u>SECOND YEAR</u>				
<u>FALL SEMESTER</u>				
RAST 1101	Industrial Electronics I	3	3	0
RAST 1111	Industrial Electronics Lab I	3	0	6
RAST 1104	Introduction to Robotics	2	1	2
	General Education	3		
	Elective	4		
	Total	15		
<u>SPRING SEMESTER</u>				
RAST 1102*	Industrial Electronics II	3	3	0
RAST 1103*	Motors and Drives	3	3	0
RAST 1113*	Motors & Drives Lab	3	0	6
RAST 1206*	Programmable Logic Controllers	3	1	4
RAST 1212*	Industrial Electronics Lab II	2	0	6
	Total	14		
<u>SUMMER SEMESTER</u>				
RAST 2106*	Industrial Electronics III	2	2	0
RAST 2116	Industrial Electronics Lab III	2	0	4
	Total	4		
GRADUATION REQUIREMENT		64		

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