



**Robotics/Automated Systems Technology 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 1265	CNC Programming and Process Planning	2	2	0
__ 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	2	0	4
__ RAST 1113*	Motors & Drives Lab	3	0	6
__ RAST 1114	Math for Industrial Technology	3	3	0
__ RAST 1206*	Programmable Logic Controllers I	3	1	4
__ RAST 1212*	Industrial Electronics Lab II	2	0	4
__ RAST 2101*	Application Planning & Layout	2	1	2
__ RAST 2105*	Transducers	2	1	2
__ RAST 2106*	Industrial Electronics III	2	2	0
__ RAST 2116*	Industrial Electronics Lab III	2	0	4
__ RAST 2151*	Applied Robotics Lab I	6	0	12
__ RAST 2153*	Applied Robotics II	6	0	12
__ RAST 2154*	Robot Controller Maintenance	2	1	2
__ RAST 2165*	Fluid Power	2	1	2
__ RAST 2355*	Programmable Logic Controllers II	2	1	2
__ RAST 2395*	Advanced Robot Controller Programming	2	1	2
	<b>Total</b>	<b>60</b>		

**GENERAL EDUCATION**

<b>Total</b>	<b>6</b>
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<b>GRADUATION REQUIREMENT</b>	<b>66</b>
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\*Denotes Prerequisites

**Evaluator** \_\_\_\_\_ **Date** \_\_\_\_\_



A COMMUNITY & TECHNICAL COLLEGE

# Robotics/Automated Systems Technology Diploma Program Course Requirements 2010-2011

Course #	Course Title	Credits	Lecture Hrs	Lab Hrs
<b>FIRST YEAR</b>				
<b>FALL SEMESTER</b>				
MDFT 1110	Intro to Parametric Modeling	2	1	2
MTRD 1265	CNC Programming and Process Planning	2	2	0
RAST 1101	Industrial Electronics I	3	3	0
RAST 1104	Introduction to Robotics	2	1	2
RAST 1110	Intro to Manufacturing	2	2	0
RAST 1111	Industrial Electronics Lab I	2	0	4
RAST 1114	Math for Industrial Technology	3	3	0
	<b>Total</b>	<b>16</b>		
<b>SPRING SEMESTER</b>				
RAST 1102*	Industrial Electronics II	3	3	0
RAST 1103*	Motors and Drives	3	3	0
RAST 1109	Computers in Industry	2	1	2
RAST 1113*	Motors & Drives Lab	3	0	6
RAST 1206*	Programmable Logic Controllers I	3	1	4
RAST 1212*	Industrial Electronics Lab II	2	0	4
	<b>Total</b>	<b>16</b>		
<b>SUMMER SESSION</b>				
RAST 2101*	Application Planning & Layout	2	1	2
RAST 2106*	Industrial Electronics III	2	2	0
RAST 2116*	Industrial Electronics Lab III	2	0	4
	<b>Total</b>	<b>6</b>		
<b>SECOND YEAR</b>				
<b>FALL SEMESTER</b>				
RAST 2105*	Transducers	2	1	2
RAST 2151*	Applied Robotics Lab I	6	0	12
RAST 2165*	Fluid Power	2	1	2
RAST 2355*	Programmable Logic Controllers II	2	1	2
General Education		3		
	<b>Total</b>	<b>15</b>		
<b>SPRING SEMESTER</b>				
RAST 2153*	Applied Robotics II	6	0	12
RAST 2154*	Robot Controller Maintenance	2	1	2
RAST 2395*	Advanced Robot Controller Programming	2	1	2
General Education		3		
	<b>Total</b>	<b>13</b>		
<b>GRADUATION REQUIREMENT</b>		<b>66</b>		

\*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.*

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