



**Robotics/Automated Systems Technology AAS
Program Course Requirements
2010-2011**
revised 8/20/10

Student Name _____ **Student ID#** _____

Course #	Course Title	Credits	Lecture Hrs	Lab Hrs
----------	--------------	---------	-------------	---------

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 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
__ RAST 2390*	Robotics Internship	1-3		
or __ RAST 2399*	Independent Study	1-3		
	Total	58		

GENERAL EDUCATION

Student must complete the requirements listed in the AAS Degree/General Education Transfer Curriculum document.

Total **20**

Recommended General Education Classes:

ENGL 1410	Composition I	SPCH 1410	Intro to Communications
ENGL 1450	Intro to Humanities	PSYC 2421	General Psychology
MATH 1441	Concepts in Math	ARTS 1401	Black and White Photo

GRADUATION REQUIREMENT **78**

*Denotes Prerequisites

Evaluator _____ **Date** _____



Robotics/Automated Systems Technology AAS Program Course Requirements 2010-2011

A COMMUNITY & TECHNICAL COLLEGE

Course #	Course Title	Credits	Lecture Hrs	Lab Hrs
FIRST YEAR				
FALL SEMESTER				
General Education		7		
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 1109	Computers in Industry	2	1	2
RAST 1110	Intro to Manufacturing	2	2	0
RAST 1111	Industrial Electronics Lab I	2	0	4
Total		22		
SPRING SEMESTER				
General Education		6		
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 I	3	1	4
RAST 1212*	Industrial Electronics Lab II	2	0	4
Total		20		
SUMMER SESSION				
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
Total		6		
SECOND YEAR				
FALL SEMESTER				
General Education		7		
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
Total		19		
SPRING SEMESTER				
General Education		0		
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
RAST 2390*	Robotics Internship	1-3	0	1
or RAST 2399*	Independent Study	1-3	0	1
Total		11		
GRADUATION REQUIREMENT		78		

*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.

CLC is committed to a policy of nondiscrimination in employment and education opportunity. No person shall be discriminated against in the terms and conditions of employment, personnel practices, or access to and participation in, programs, services, and activities with regard to race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, sexual orientation, or membership or activity in a local commission as defined by law. This information is available in alternative format upon a 48-hour advance request by contacting Disability Services at 800-933-0346, ext. 8175. Minnesota Relay Service: 800-627-3529 or 612-297-5353.