

Lake Superior College

Program Planner

Created on: 03/01/05

Updated: 02/09/11

Effective: *Fall 2011*

Qualified applicants should be aware that program class sizes are limited, which may delay acceptance into the program.

You may be required to complete additional (or less) coursework, dependent upon the results of your Computerized Placement Test (CPT) and/or previous coursework completed or certifications earned.

General Education courses required by this program may be taken during any term, as long as the specific prerequisites for that course have been met. Please check with your advisor.

Program: **Electronic Engineering Technology-
Industrial Controls**

Degree Type: **Associate in Applied Science**

Total Required Credits: **72**

Pre-program Requirements

Successful entry into this program requires a specific level of skill in the areas of English, mathematics, and reading. Program entry will depend, in part, on meeting the prerequisites listed below:

English:

- A score of 86 or higher on the Sentence Skills portion of the CPT, OR
- Completion of ENGL0460 or its equivalent transfer course or higher.
- If required, ENGL0460 may be taken concurrently with Semester I coursework.

Mathematics:

- A score of 36 or higher on the Elementary Algebra Skills portion of the CPT, OR
- Completion of MATH1500 or its equivalent transfer course or higher.
- If required, MATH1500 may be taken concurrently with Semester I coursework.

Reading:

- A score of 78 or higher on the Reading Comprehension portion of the CPT, OR
 - Completion of READ0465 or its equivalent transfer course or higher.
 - If required, READ0465 may be taken concurrently with Semester I coursework.
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Semester I

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade/ Term
FYE1000	Intro to College (None)	F	1	

ELTN1402	Basic Electricity Theory (None)	F/S	8	
ELTN1412	Digital Electronics (None)	F/S	2	
ELTN1422	Media and Cabling (None)	F/S	3	
ELTN1500	Practical PC Maintenance (None)	F/S	2	
Total Credits for Term			16	

Semester II

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade/ Term
ELTN1432	Solid-State Devices (ELTN1402)	F/S	5	
ELTN1442	Motors and Generators (ELTN1402)	S	8	
	General Education Electives (Refer to Table 2)	S	3	
Total Credits for Term			16	

Summer Session

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade/ Term
	General Education Electives (Refer to Table 2)	SUM	7	
Total Credits for Term			7	

Semester III

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade/ Term
ELTN1470	Systematic Troubleshooting (ELTN1402)	F/S	1	
ELTN2440	Motor Speed Controllers (ELTN1442)	F	2	
ELTN2442	Automation Controllers (ELTN1412)	F/S	3	
ELTN2444	Power Distribution for Industrial Controls (ELTN1402)	F	4	
	Technical Electives (Refer to Table 1)	F	6	
Total Credits for Term			16	

Semester IV

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade/ Term
ELTN2400	CET Exam Preparation (ELTN1402, ELTN1412, and ELTN1432)	S	2	
ELTN2430	Introduction to Instrumentation (ELTN1402)	S	3	
ELTN2450	Automation Controller Applications (ELTN2442 and concurrent enrollment in ELTN2452)	S	5	
ELTN2452	Process Control Theory (ELTN1402)	S	3	
	General Education Electives (Refer to Table 2)	S	4	
Total Credits for Term			17	

Table 1: Technical Electives

(**NOTE:** Any **ELTN** or **ELEC** courses not required on the planner may be taken as **technical** electives. Other courses may be allowed as electives with program advisor approval.)

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade/ Term
COMM1601	Interviewing Procedure and Practice (None; computer skills necessary)	F/S	1	
ELTN2477	Electronics Internship (Instructor's consent)	ARR	2 (48 hrs per credit)	
MATH1500	Applied Algebra and Trigonometry (None)	F/S	4	

Table 2: General Education Requirements (15 Credits)

General Education courses shall be selected from at least three (3) of the ten (10) goal areas of the Minnesota Transfer Curriculum. The general education courses listed below are required and satisfy the MTC goal areas.

Course ID#	MTC Goal Area	Credits	Grade/ Term
FYE1000		1	
Communication	1	3	
Natural Sciences or Math	3 or 4	3	
Social and Behavioral Sciences or Humanities	5 or 6	3	
General Education – Other		5	

- All courses in diploma and/or certificate programs are acceptable for credit toward Lake Superior College degree programs as indicated on individual program planners.
- This is not a contract; Lake Superior College reserves the right to change the planner as necessary.
- This document can be made available in alternative formats, such as large print, Braille, or audio tape, by calling 733-7650 or MRS/TTY 800-627-3529.