Lake Superior College
Program Planner

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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:	**Integrated Manufacturing – Engineering CAD Technology**
Degree Type:	**Associate in Applied Science**
Total Required Credits:	**68**

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 MATH0450 or its equivalent transfer course or higher.
- If required, MATH0450 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.

Semester I

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade / Term
FYE1000	**Intro to College** (None)	**F**	**1**	
CADE1468	**SolidWorks I** (ENGL0460, MATH0450, READ0465, or concurrent enrollment)	**F/S**	**3**	
INMG1400	**Introduction to Manufacturing Technology** (None)	**F/S**	**4**	
INMG1410	**Mechanical Blueprint Reading** (None)	**F/S**	**3**	
INMG1420	**Design Application Concepts I** (None)	**F**	**3**	
WLDG1560	**Gas Metal Arc Welding I** (None)	**F/S**	**3**	
Total Credits for Term			**17**	

Semester II

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade / Term
CADE1407	**AutoCAD I** (ENGL0460, MATH0450, and READ0465 or concurrent enrollment)	**F/S**	**3**	
CADE1450	**Mechanical Details** (INMG1410 or instructor's consent)	**F/S**	**3**	
CADE1480	**Industrial/Mechanical CAD Applications I** (CADE1450 or concurrent enrollment)	**F/S**	**3**	
INMG1412	**Advanced Mechanical Blueprint Reading** (INMG1410)	**F/S**	**3**	
	Technical Elective (Refer to Table 1)	**F/S**	**3**	
Total Credits for Term			**15**	

Semester III

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade / Term
CADE1440	**Inventor I** (CADE1407 or concurrent enrollment)	**F/S**	**3**	
CADE1482	**Industrial/Mechanical CAD Applications II** (CADE1480)	**F/S**	**3**	
CADE2400	**AutoCAD II** (CADE1407)	**F/S**	**3**	
	Technical Elective	**F/S**	**3**	

	(Refer to Table 1)			
	General Education Electives (Refer to Table 2)	**F/S**	**6**	
Total Credits for Term			**18**	

Semester IV

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade/ Term
CADE1442	**Inventor II** (CADE1440)	**F/S**	**3**	
CADE2472	**AutoCAD Design Project** (CADE2400 or concurrent enrollment)	**F/S**	**3**	
COMM1601	**Interviewing Procedure and Practice** (None; computer skills necessary)	**F/S**	**1**	
	Technical Elective (Refer to Table 1)	**F/S**	**3**	
	General Education Electives (Refer to Table 2)	**F/S**	**8**	
Total Credits for Term			**18**	

Table 1: Technical Electives

Course ID#	Course Title (Pre-reqs)	Term	Credits	Grade/ Term
CADE1470	**SolidWorks II** (CADE1468)	**F/S**	**3**	
CADE2407	**Engineering Technology Internship** (Instructor's consent)	**ARR**	**1-7**	
CADE2420	**Electrical/Electronic Drawings** (CADE1407 or concurrent enrollment or instructor's consent)	**F/S**	**3**	
CADE2430	**Industrial Piping Layout** (CADE2400 or instructor's consent)	**F/S**	**3**	
CADE2436	**Structural Detailing and Design** (CADE1407 or CADE1468 or instructor's consent)	**F/S**	**3**	
CADE2460	**Jigs and Fixtures** (CADE1407 or CADE1468 or concurrent enrollment or instructor's consent	**F/S**	**3**	
INMG1422	**Design Application Concepts II** (INMG1420)	**F/S**	**3**	

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.

Course ID#	MTC Goal Area	Credits	Grade / Term
FYE1000		**1**	
General Education Electives - (See AA Planner)		**14**	

- *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.*