# SAULTCOLLEGE OF APPLIED ARTS AND TECHNOLOGY

# **SAULT STE. MARIE, ONTARIO**



# **COURSE OUTLINE**

COURSE TITLE: CAD Tools

**CODE NO.:** ELN210 **SEMESTER:** Two

**PROGRAM:** Electrical Engineering Technician

Process Automation

- Process Automation & Trades

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**AUTHOR:** Edward Sowka, Barry Sparrow

**DATE:** January **PREVIOUS OUTLINE DATED:** January

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APPROVED: "Corey Meunier" Jan 17

CHAIR DATE

TOTAL CREDITS: 3

PREREQUISITE(S): ELN100

HOURS/WEEK: 2

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Technology & Skilled Trades (705) 759-2554, Ext. 2610

#### I. COURSE DESCRIPTION:

This course is designed to develop skills in the use of the AutoCAD, to generate and modify AutoCAD drawings, electrical/electronic schematics and diagrams. This course will prepare the student for the automated drafting environment.

#### II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Correctly utilize AutoCAD menu and command structure to produce and modify AutoCAD drawings, electrical schematics and diagrams.

## Potential Elements of the Performance:

- Correctly utilize the AutoCAD menus and commands.
- Produce and modify schematic diagrams and electrical related diagrams with correct and accurate connections and labelling.

#### III. TOPICS:

1. AUTOCAD menu structures and commands.

## IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- USB removable storage device. (1 GB or larger)
- Evaluation version of AutoCAD (optional download by student)
- Instructor handouts / Internet resources
- Theory notes / AutoCAD Command Summary (LMS)

The link for downloading AutoCAD is available at <a href="www.autodesk.com">www.autodesk.com</a>.
Follow Autodesk's registration instructions completely and carefully (you must create an account using your Sault College email address). READ ALL REQUIREMENTS FOR REGISTRATION. Ensure your PC has the required hardware and software resources. Although a MAC version is available, support for the MAC installation is minimal.

# V. EVALUATION PROCESS/GRADING SYSTEM:

The final grade will be derived as follows;

• 100% - AUTOCAD Drawings (approximately 6 Drawings)

The drawings will vary in value, and subject to adjustment depending on the number of drawings assigned;

Drawing 1 = 10% Drawing 2 = 10% Drawing 3 = 15% Drawing 4 = 20% Drawing 5 = 20% Drawing 6 = 25%

# See Special Notes for additional grading policies

The following semester grades will be assigned to students in postsecondary courses:

<u>Grade</u>	<u>Definition</u>	Grade Point <u>Equivalent</u>
A+	90 - 100%	4.00
Α	80 - 89%	4.00
В	70 - 79%	3.00
С	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	Below 50%	0.00
S	Satisfactory achievement in field/clinical	
	placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical	
	placement or non-graded subject area.	
X	A temporary grade limited to situations with	
	extenuating circumstances giving a student	
	additional time to complete the requirements for a	
	course.	
NR	Grade not reported to Registrar's office.	

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

#### **SPECIAL NOTES:**

# VI. Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

It is the departmental policy that once the classroom door has been closed and the professor has started the lesson, the learning process has begun. Late arrivers will not be granted admission to the room. Refer to the Student Code of Conduct for further information.

- Attendance to all classes is compulsory, unless discussed with the instructor in advance of
  the absence and the absence is for a medical, family or other legitimate emergency. As
  there is no textbook required for this course, it is critical that you attend and be present for
  scheduled classes. This means being on time for the start of the class, and being present
  for the entire 2 hour period. If you are late and miss attendance taking, it is the student's
  responsibility to advise the instructor at the end of class. More than 30 minutes late will be
  regarded as an absence.
- A student that is absent for any class (for a legitimate purpose) may be required to provide documentation (e.g., doctor's note) immediately upon returning otherwise the student will be considered absent.
- Tests, quizzes and other activities will not be scheduled on an individual basis, unless it is for a medical or family emergency.
- Disruptions to classes, such as lateness, are not acceptable and will be dealt with on an individual basis. Students exhibiting chronic lateness or absenteeism will be required to meet with the Dean or Academic Chair, and may be placed on academic probation.
- It is the responsibility of the student to check LMS frequently for new postings, emails, assignments, etc.
- The use of Electronic Recording Devices is prohibited unless individual permission is obtained from the instructor. The use of cell phones during scheduled classes is prohibited. Turn off all cell phones prior to attending class.
- Use of the computer workstations in B1153 during class time is for AutoCAD ONLY.
   Anyone using these workstations during scheduled class time for anything other than AutoCAD related work will be required to shut down the unrelated application immediately.
   Failing to do so will result in immediate dismissal from the scheduled class and the student may be required to meet with the Dean, and may be placed on academic probation.

Subsequent violations of this, and other specified guidelines for the use of computers in B1153 may result in academic probation, removal of privileges in B1153, or dismissal from the course. As this lab is operated by the Civil/Construction Department, their departmental guidelines for this lab take precedent. Keep your work area clean. Report any hardware or software problems by noting the problem on a sheet of paper, indication station number and description of problem, then place problem report on table at front of class. Sault College computer lab policies apply to B1153.

#### **Drawing Assignments**

- Drawing assignments will be worked on in class, however assignments will require work outside of class time. Having access to AutoCAD elsewhere is not an acceptable solution to replacing scheduled class time. It is meant only as a supplement. There will be details/procedures/requirements discussed in class that are expected from all students during the semester.
- All assignments must use the template file (if one is provided). The instructor will be
  verifying the originality of submitted files and plagiarized or copied work will be given a
  grade of 0. This behaviour will be reported to the Dean's office and Student Services
  with sanctions applied in accordance with college policies respecting academic dishonesty.

### Due Date and End Date

- Assignments that are not handed in by the specified end date will be assigned a grade of 0%. There will be a "grace period" following the due date however the assignment grade will be limited to a maximum of 60%. After the end date has passed, the assignment will be graded at 0%.
- Assignments will generally be submitted via LMS. Submission of files of incorrect format
  will be deemed not submitted. If resubmitted late they will be given a grade of a maximum
  of 60%. PDF files may be required in some instances. Some hard copy submissions may
  be required. It is the students' responsibility to know how to submit work electronically and
  ensure they have copies of files stored in multiple locations. Loss of a file will not be
  accepted as reason for non-submission of an assignment.
- When communicating with the instructor via email, it is required that you use your college assigned email address. Emails should be sent via LMS. Email received from other email clients may not be opened.
- Students are expected to follow the specific instructions for each assignment. Verbal instruction will be given in class so attendance is critical.

Notes: