

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY  
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: CIVIL ENGINEERING TECHNICIAN

Code No.: ARC 115

Program: DRAFTING & DESIGN

Semester: TWO

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New: \_\_\_\_\_ Revision: X

APPROVED: *L.P. Crozette*  
Chairperson

87-02-04  
Date

DRAFTING & DESIGN

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**GENERAL OBJECTIVES**

Following the successful completion of DRF 110, the student will be introduced to the whole field of drawings, schedules and sketches that are widely used in the civil engineering industry.

It should be realized that the course does not cover the creation of design drawings as such work will form the basis of subsequent courses in structural design, hydraulics and soil mechanics.

1. To read civil engineering drawings accurately and quickly.
2. To develop neat sketching ability.
3. To produce a broad range of typical civil engineering drawings.

**SPECIFIC OBJECTIVES:**

To complete the following work neatly and accurately:

1. Bulk excavation
2. Highway sections
3. Highway alignment
4. Sewer plan and profile
5. Concrete structure (isometric)
6. Reinforced concrete wall detail
7. Re. bar schedule
8. Graphs
9. Progress schedules
10. Prestressed concrete detail
11. Structural steel detail
12. Truss analysis (Bow's notation)
13. Piping layout (isometric)
14. Storm water manhole detail
15. Site layout - grid control

**GRADING AND EVALUATION:**

All of the above assignments will be considered of equal value.