

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: Research Report

CODE NO. : ELR 311 **SEMESTER:** SIX

PROGRAM: ELECTRICAL ENGINEERING TECHNOLOGY

AUTHOR: Robert McTaggart

DATE: 01/2000 **PREVIOUS OUTLINE DATED:** 01/1998

APPROVED:

	_____	_____
	DEAN	DATE

TOTAL CREDITS: 3

PREREQUISITE(S): ELR 215, ELR 236, ELR 320

LENGTH OF COURSE: 16 weeks **TOTAL CREDIT HOURS:** 48

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For additional information, please contact Kitty DeRosario
School of Trades & Technology
(705) 759-2554, Ext. 642

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Code No.**I. COURSE DESCRIPTION:**

The Research Report is intended to demonstrate that the student can function at the Engineering Technology level. The research activity may be a hardware or software development or the analysis of an industrial/technical problem provided an industrial sponsor can be found.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Research and prepare a technical report.

Potential Elements of the Performance:

- Utilize common resources (libraries, internet...) to research technical topics/design information.
- Write a technical report to a specified format within specified deadlines.
- Appropriately document sources of information to APA (or other suitable) publication standards.
- Provide sufficient documentation to allow an Electrical Technician or Technologist to easily repeat the project.

2. Demonstrate proficiency in project management.

Potential Elements of the Performance:

- Select, price, order and expedite delivery of material/equipment.
- Organize and schedule construction and commissioning of a project.
- Participate in project (progress) meetings.

3. Construct and Demonstrate a technical project.

Potential Elements of the Performance:

- Prepare functional specifications for proposed project.
- Prepare drawings as required to construct project.
- Interpret manufacturers' drawings and specifications.
- Utilize necessary tools/equipment/materials required to construct project.
- Complete work according to a given schedule.
- Troubleshoot and revise initial design (commissioning) to produce

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- a working project.
- Produce sufficient documentation to allow repetition of results.

III. TOPICS:

1. As approved by faculty advisor. It is preferred that the student construct a project however, consideration will be given to 'pure research' types of projects as well.

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

The student is responsible for determining and acquiring resources necessary to complete the research project.

V. EVALUATION PROCESS/GRADING SYSTEM:

The grading weight will be:*

Final Report:	35%
Hardware and software construction/development:	35%
Daily Log Book	10%
Management Skills	20%

* Weighting may change to suit the project. The student should confirm (in writing) with the faculty advisor if the grading method will be altered. If the project documentation is insufficient to allow duplication of the results by another Electrical Technician or Technologist the student will receive an R grade. If a working project is not completed within the given timeframe because of negligence or poor planning/execution on the part of the student an R grade will be assigned.

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

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	3.75
B	70 - 79%	3.00
C	60 - 69%	2.00
R (Repeat)	59% or below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	

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S	Satisfactory achievement in field placement or non-graded subject areas.
X	A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see <i>Policies & Procedures Manual – Deferred Grades and Make-up</i>).
NR	Grade not reported to Registrar's office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has been impossible for the faculty member to report grades.

VI. SPECIAL NOTES:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 so that support services can be arranged for you.

Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Plagiarism

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course, as may be decided by the professor. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

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The faculty advisor will provide the student with scheduling constraints, mandatory meeting dates and times, and further details on grading (penalties for late submissions and/or missing mandatory meetings). If the student is unsure of his/her responsibilities it is his/her responsibility to approach the faculty advisor for clarification and to produce documentation of the conversation. A very high degree of independence is expected of the student.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the instructor. Credit for prior learning will be given upon successful completion of the following:

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.