SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title	MATHEMATICS
Code No	MTH 385-3
Program	ELECTRICAL/ELECTRONIC TfeCHNOLOGY; COMPUTER TECHNOLOG
Semester	VI
Date	JUNE, 1986
Author	J. REAL

New: Revis ion:

APPROVED: C^^^ir^ers5ri

MATHEMATICS MTH 385-3,.ELTY

COURSE NAME COURSE NUMBER

PHILSOPHY/GOALS:

When the student has successfully completed this course he/she will have demonstrated an acceptable understanding of the course material as listed elsewhere.

The student should then be able to apply this knowledge in his/her studies of other courses in the program where these are applications of these mathematical concepts.

Upon graduation, the student should be able to develop a good command of this subject matter through additional practice.

METHOD OF ASSESSMENT (GRADING METHOD)

The student will be assessed by written tests only. There will be periodic topic tests at times mutually agreed upon (usually) by students and instructor. A letter grade will be assigned for th student's progress report based upon a weighted average of the **student's test results**.

See also the Mathematics department's annual publication "To The Mathematical Student" which is presented to the students early in each academic year.

TEXTBOOK(S):

CALCULUS FOR ENGINEERING TECHNOLOGY; W. R. Blakeley

TOPIC **NO**	**PERIODS**	TOPIC DESCRIPTION	ASSIGNMENTS	**REFERENC**
	10	Laplace Transform -		Ch. 18
		Finding transform by definition	pg. 379	
		Table of transforms	383	
		Finding function from transform	386	
		Differential equations	388	
	14	Power Series -		Ch. 15
		Binomial and exponential series	pg. 294	
		Maclaurin series	301	
			304	.
		Integration using series	306	
		Taylor series	311	
		Fourier series	400	Ch, 19
			405	
	18	Statistics		Handout
		Descriptive statistics Frequency distributions mean/ median/ mode/ quantiles, standard deviation, variance, standardized variable		
		Probability theory Conditional probability/ independent and dependent events, mutually exclusive events, permutations, combinations, probability distributions		
		Inferential statistics Binomial distribution, normal distribution, sampling theory, estimation theory with confidence intervals		