

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

COURSE OUTLINE

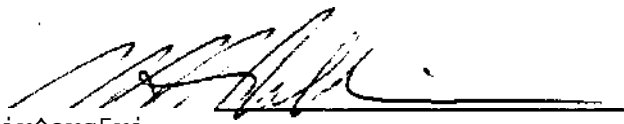
Course Title MATHEMATICS
Code No MTH 385-3
Program ELECTRICAL/ELECTRONIC TECHNOLOGY; COMPUTER TECHNOLOGY
Semester VI
Date JUNE, 1986
Author J. REAL

New:

Revision:

APPROVED:

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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 the 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 | <u>Laplace Transform</u> - | | 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 | | |