MODULE TITLE

Engineering Mathematics 6 MODULE CODE MA4066

PREREQUISITE MODULE(S)

GRADING TYPE

Normal

CREDITS

3

AIMS/OBJECTIVES

To introduce the student to the Mathematics that underlie and describe the computing process.

SYLLABUS

[Mathematical logic,] propositional logic, quantifiers, predicate calculus, [concepts of proof and program correctness].

[Mathematical Induction]

[Difference Equations]: solution of some simple equations. [Algorithms and analysis of algorithms.]

[Graph Theory and Graph Algorithms]. Trees

[Finite state machines, computability.]

PRIME TEXT(S)

Rosen, K H, 1999. Discrete Mathematics and its Applications (4th Ed), McGraw Hill

Johnsonbaugh, R, 1997. Discrete Mathematics (4th Ed), Prentice Hall

OTHER RELEVANT TEXTS

Grimaldi, R. P., 1998. Discrete and Combinatorial Mathematics (4th Ed), Addison Wesley Longman

Biggs, N L, 1989 Discrete Mathematics (2nd Ed), Oxford University Press