SE 3306 Mathematical Foundations of Software Engineering (3 semester credit hours) Boolean logic, first-order logic, models of first-order logic. Introduction to program verification, applications in software engineering. Completeness Theorem. Regular expressions, regular sets, finite-state machines, and applications in software engineering. Graph Theory, graph algorithms. Statecharts, Petri Nets and their role in software engineering. Prerequisite: (CE 2305 or CS 2305 or TE 2305) with a grade of C or better or equivalent. (3-0) S