

# MAT 4110: Combinatorics

Induction, permutations and combinations, general counting methods, generating functions, recurrence relations, principle of inclusion-exclusion, graph theory, trees, planarity, crossing numbers, Hamiltonian cycles, Eulerian tours.

**Credits:** 3

**Prerequisites:**

MAT 1505

MAT 1505 :D-

**Program:** [Mathematics and Statistics](#)