## SECOND YEAR

Electric Circuits II	COE210
Prerequisite : COE205	(3-2-1-2)

Two-Port Network: One- port network, Y-Z-G-H and parameters, image and iterative Operations, Attenuation and phase functions, and insertion loss of Networks. Filters: Constant K- filers, low pass, high pass, and all pass filters, Butterworth and Chebyshev filters, Network transformations, Active filters. General principle of rotating electrical machines, calculation of induced m.f energy, power and torque in DC machines, constructions of DC machines, principle of operation of DC motors, calculation of speed and torque, transformer type and contraction and transformer action.

**Practical part:** Two-Port Network. Attenuation. Filters: Constant K– filers, low pass, high pass, and all pass filters, Butterworth and Chebyshev filters, Network transformations, Active filters.