DC Circuits:

- Nodal analysis, Mesh analysis (Alexander Sadiku, 4th Edition, Chapter-3)
- Superposition, Source Transformation, Thevenin's Theorem, Norton's Theorem, Maximum Power Transfer (Alexander Sadiku, 4th Edition, Chapter-4)

AC Circuits:

- Introduction to phasor, Impedance calculation of R, L, C element (Alexander Sadiku, 4th Edition, Chapter-9 [9.3, 9.5, 9.7])
- Sinusoidal steady state analysis using Node, Mesh, Superposition, Source Transformation. Thevenin and Norton equivalent circuit. (Alexander Sadiku, 4th Edition, Chapter-10)
- AC power analysis, Instantaneous and average power, Maximum average power transfer, Effective and RMS value. Apparent power and power factor, Complex power, power factor correction (Alexander Sadiku, 4th Edition, Chapter-11)
- Phasor diagram of RLC series, parallel branch of a circuit

Polyphase Circuits:

- Balanced three phase circuit (Alexander Sadiku, 4th Edition, Chapter-12)

Magnetic Circuits:

- Basic concepts, series-parallel magnetic circuits (Excerpt from my website)