

"电路理论 Circuit theory (4 credits)

The content of this course includes the resistance circuit analysis, the dynamic electric circuit analysis and sine steady-state analysis. The contents of the resistance circuit analysis mainly includes the relations between voltage and current in lumped circuit, the analytic ways using independent current and voltage variances introduction of the analytic ways and decomposition ways in the large-scale circuit, the analytic ways in single port network, simple non-linear resistance circuit, and so on. The analysis of dynamic state electric circuit mainly includes the capacity and the inductance components, first-order circuit, second-order circuits and the use of impulse function and the exchanges dynamic state electric circuit. The sine steady analysis mainly includes reactance and admittance, the energy and powers of sine steady-state, three-phase circuit, the frequency response, coupling inductance and ideal transformer, dual port network etc."