

# The Hong Kong University of Science and Technology

## UG Course Syllabus

Electronic Circuits

ELEC2400

4 Credits

Pre-requisites: ELEC 1100 AND (MATH 1003 OR MATH 1014 OR MATH 1020 OR MATH 1024)

Co-requisite: PHYS 1114 OR PHYS 1314.

Exclusion(s): ELEC 2420.

**Name:** CHAU, Kevin (L1 session), ZHANG, Yihan (L2 session)

**Email:** eekchau@ust.hk (L1 session), eeyihan@ust.hk (L2 session)

### Course Description

Fundamental electronic concepts for DC and AC circuits, KVL and KCL, Thevenin's and Norton's theorems, linearity and superposition, nodal and mesh analyses, sinusoidal steady state and phasor representation, frequency response, transfer functions and Bode plots, op amps, first-order transient analysis, and diode circuits.

### Assessments:

Assessment Task	Contribution to Overall Course grade (%)
Lab	20%
Homework	10%
Mid-Term Examination	25%
Final Examination	45%

### Required Texts and Materials

No required textbook.

Reference Book:

D. V. Kerns and J. D. Irwin, Essentials of Electrical and Computer Engineering, Pearson, 2004.

### Additional Resources

NA