

The Hong Kong University of Science and Technology

UG Course Syllabus

Engineering Optics

ELEC 4610

Credits: 4

ELEC 2400

Name: Jianan Qu

Email: eequ@ust.hk

Course Description

An introductory course in optics covering fundamentals of geometrical and physical optics. Topics include: review of geometrical optics, first order optical system and analysis, aberrations, designs of optical component and system; Basic wave theory, diffraction, interference, polarization, dispersion; fundamentals of optical instrumentation. Exclusion: PHYS3038 Prerequisite: ELEC 2400

Assessments:

[List specific assessed tasks, exams, quizzes, their weightage]

Assessment Task	Contribution to Overall Course grade (%)
Mid-Term	20%
Homework	15%
Laboratory	15%
Final examination	50%

Required Texts and Materials

1. F. & L. Pedrotti, Introduction to Optics, Prentice Hall
2. Smith and Thomson, Optics, Wiley
3. R.S. Longhurst, Geometrical and Physical Optics, Wiley