ECSE 423. FUNDAMENTALS OF PHOTONICS.

Credits: 3

Offered by: Electrical & Computer Engr (Faculty of Engineering)

Terms offered: Winter 2026

View offerings for Winter 2026 in Visual Schedule Builder.

Description

Introduction to the fundamentals of modern optical and photonic engineering. Topics covered include the propagation of light through space, refraction, diffraction, polarization, lens systems, ray-tracing, aberrations, computer-aided design and optimization techniques, Gaussian beam analysis, micro-optics and computer generated diffractive optical elements. Experiments on physical and geometric optics.

- Corequisite: ECSE 305
- (3-2-4)
- Prerequisite: ECSE 354