ECSE 596. OPTICAL WAVEGUIDES.

Credits: 3

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

Terms offered: Summer 2025, Winter 2026

View offerings for Summer 2025 or Winter 2026 in Visual Schedule Builder.

Description

An in-depth analysis to guided-wave propagation. Dielectric waveguides (slab, 2D, nonlinear, spatial solitons), optical fibers (modes, dispersion relations, propagation in dispersive, nonlinear fibers, temporal solitons), beam propagation method, coupled mode theory, waveguide devices (couplers, gratings, etc.). Selection of current research topics of interest (e.g., photonic crystals, optical signal processing, etc.).

- (3-0-6)
- Prerequisite: ECSE 354