USC Viterbi
School of Engineering
Ming Hsieh Department of Electrical and Computer Engineering

Area Courses
Electromagnetics, Optics, Photonics

Fundamental Courses

EE 470 Electromagnetics II
3 units

EE 471 Applied Quantum Mechanics for Engineers
4 units EE 470

or

EE 539 Engineering Quantum Mechanics
4 units

EE 506 Semiconductor Physics
4 units EE 471, MASC 501

Optics and Photonics

EE 474 Introduction to Photonics
3 units

EE 529 Optics
4 units
EE 470

EE 530 Optical Materials, Instruments and Devices
3 units EE 529

EE 531 Nonlinear Optics
3 units EE 470

EE 540 Introduction to Quantum Electronics
4 units EE 470

EE 642 Advanced Geometrical Optics
3 units EE 529

Applications

EE 551 Principles of Radar
3 units EE 470

EE 558 Optical Fiber Communication Systems
3 units

EE 566 Optical Information Processing
3 units
EE 483

EE 571ab Microwave Networks
a:3 units, b:3 units EE 470

EE 573ab Antenna Analysis
a:3 units, b:3 units EE 470

EE 578 Reflector Antennas
3 units EE 470

Legend

Grouping

EE 000 Course Title
Course Units Prerequisite Courses
Recommended Prep. Corequisite Courses

This chart shows course relationships
Please check the University Catalogue for specific course details including any recommended prepatory courses and Degree Requirements

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