

COURSE DETAIL

INTRODUCTION TO PHOTONICS TECHNOLOGIES

Country

Singapore

Host Institution

Nanyang Technological University

Program(s)

Nanyang Technological University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Electrical Engineering

UCEAP Course Number

115

UCEAP Course Suffix**UCEAP Official Title**

INTRODUCTION TO PHOTONICS TECHNOLOGIES

UCEAP Transcript Title

PHOTONICS TECHNOLOG

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course examines the fundamentals of photonic technologies, and how these technologies are applied to and influence daily life. Topics include how photonics contributes to the fundamental platform for nanotechnology, green energy, home entertainment, data storage, sensing, imaging, biomedical healthcare, and modern optical communications. This course is intended for students with various engineering backgrounds (e.g. electrical, electronic, chemical, biological, mechanical, civil, aerospace, etc.) to learn the impact of photonics in fields ranging from nanotechnology to communications at a fundamental level rather than a mathematical-based formulated course.

Language(s) of Instruction

English

Host Institution Course Number

EE3018

Host Institution Course Title

INTRODUCTION TO PHOTONICS TECHNOLOGIES

Host Institution Course Details

https://wis.ntu.edu.sg/webexe/owa/aus_subj_cont.main

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Electrical and Electronic Engineering

Course Last Reviewed

2025-2026

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