

# COURSE DETAIL

## OPTICS AND OPTICAL DESIGN

**Country**

Sweden

**Host Institution**

Lund University

**Program(s)**

Lund University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Physics Engineering

**UCEAP Course Number**

116

**UCEAP Course Suffix****UCEAP Official Title**

OPTICS AND OPTICAL DESIGN

**UCEAP Transcript Title**

OPTCS & OPTICL DSGN

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

The course covers the basic principles of optics and gives practical knowledge on optical design with the help of a ray tracing program. Topics covered in the course include Ray optics, including matrix-formulation, wave optics, Fourier optics, electromagnetic optics, and polarization. The course includes three laboratory exercises (interferometry, Fourier optics, and polarization) and a project using ray tracing.

## Language(s) of Instruction

English

## Host Institution Course Number

FAFF01

## Host Institution Course Title

OPTICS AND OPTICAL DESIGN

## Host Institution Course Details

<https://fukurser.lth.se/fud/details/?code=FAFF01F&lang=en>

## Host Institution Campus

Lund

## Host Institution Faculty

Engineering

## Host Institution Degree

## Host Institution Department

Engineering- Physics

## Course Last Reviewed

2023-2024

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