

# 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 & OPTCL 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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