COURSE DETAIL

FATIGUE
Country Sweden
Host Institution Lund University
Program(s) Lund University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering
UCEAP Course Number 158
UCEAP Course Suffix
UCEAP Official Title FATIGUE
UCEAP Transcript Title FATIGUE
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course describes the physical mechanisms behind fatigue, and the methods that are used in design against fatigue. Course content includes cyclic deformation and crack initiation, fracture mechanisms, fracture mechanics treatment of fatigue cracks, fatigue crack growth in ductile and brittle materials, short fatigue cracks, contact fatigue, fatigue and environments, corrosion fatigue and high temperature fatigue, life estimates, and dimensioning against fatigue. Assumed prior knowledge: Materials Engineering or Advanced Material Technology, Solid Mechanics, Basic Course.

Language(s) of Instruction
English

Host Institution Course Number
FMEN30

Host Institution Course Title
FATIGUE

Host Institution Course Details
https://kurser.lth.se/lot/course-syllabus/25_26/FMEN30

Host Institution Campus
Lund

Host Institution Faculty
Engineering

Host Institution Degree

Host Institution Department

Course Last Reviewed
2025-2026

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