COURSE DETAIL

MECHANICAL VIBRATIONS
Country Sweden
Host Institution Lund University
Program(s) Lund University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering Engineering
UCEAP Course Number 113
UCEAP Course Suffix
UCEAP Official Title MECHANICAL VIBRATIONS
UCEAP Transcript Title MECH VIBRATIONS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
This course presents the theoretical foundation of mechanical vibrations in multi-dimensional systems. The course covers applications that are directed towards machine and structural dynamics, vibrations in n-degree of freedom systems, damping mechanisms, gyroscopic forces, modal analysis (classical normal modes and complex modes), transfer functions, transient response, continuous systems, vibration damping, and vibration isolation. Applications include the numerical analysis of mechanical vibrations.

Language(s) of Instruction
English

Host Institution Course Number
FMEN11

Host Institution Course Title
MECHANICAL VIBRATIONS

Host Institution Course Details
https://kurser.lth.se/lot/course-syllabus-en/24_25/FMEN11

Host Institution Campus
Lund University

Host Institution Faculty
Engineering

Host Institution Degree

Host Institution Department
Engineering- Mechanics

Course Last Reviewed
2024-2025

Print