COURSE DETAIL

STRENGTH OF MATERIALS
Country Taiwan
Host Institution National Taiwan University
Program(s) National Taiwan University
UCEAP Course Level Lower Division
UCEAP Subject Area(s) Mechanical Engineering
UCEAP Course Number 51
UCEAP Course Suffix
UCEAP Official Title STRENGTH OF MATERIALS
UCEAP Transcript Title STRENGTH/MATERIALS
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

The course examines statics of deformable solids; deformation, stress and strain analysis; mechanical properties of materials (stress-strain-temperature relationship); failure modes of materials; one-dimensional components; axial force/torsion on rods and shafts; beam bending; and column buckling. Topics include: tension, compression and shear, axially loaded members, torsion, shear forces and bending moments, stresses in beams (shear and moment diagrams), analysis of stress and strain, applications of plane stress, deflections of beams, columns.

Language(s) of Instruction
English

Host Institution Course Number
ME2003

Host Institution Course Title
STRENGTH OF MATERIALS

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

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