Overview

This is the fundamental engineering course for mechanical engineers, with content as follows: Stress, strain. tension/compression test, stress/strain diagram and relationships, Hooke's law, strain energy, Poisson's ratio. shear stress/strain diagram, failure due to creep and fatigue, axial (thermal) stress/strain, geometrical properties of plane figures & second moment of area, simple bending stress, deflections in beams, torsion of circular shafts, helical springs, statically determinate/indeterminate systems, introduction to finite elements, combined stresses, membrane stresses in thin cylindrical and spherical pressure vessels, stress/strain variation at a point in 2D (Mohr's circle), stress variation in 3D.
Faculty
Faculty of Engineering

School
School of Mechanical and Manufacturing Engineering

Study Level
Undergraduate

Indicative contact hours
6

Timetable
Visit timetable website for details
Conditions for Enrolment

Prerequisite: (MATH1231 or DPST1014 or MATH1241) and (MMAN1300 or CVEN1300 or MINE1300 or ENGG1300)
Equivalent Courses

ENGG2400 6 UOC
Mechanics of Solids 1

CVEN2301 6 UOC
Mechanics of Solids for Civil Engineers
Course Outline

To access course outline, please visit:

MMAN2400 Course Outline
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179