

## University of Pretoria Yearbook 2020

## Theory of structures 321 (STU 321)

**Qualification** Undergraduate

**Faculty** Faculty of Engineering, Built Environment and Information Technology

Module credits 8.00

**Programmes** BSc Architecture

Prerequisites STU 311 GS

**Contact time** 3 lectures per week

**Language of tuition** Module is presented in English

**Department** Civil Engineering

Period of presentation Semester 2

## Module content

- 1. Timber structures
- Loads on typical timber structures, Limit-states design principles
- Bending, shear and deflection: Design of flexural members without and with axial loads
- Tension members: Tension members in roof trusses
- Compression members: Design of compression members in trusses and as support members for trusses
- · Bracing systems
- 2. Steel Structures
- Loads on typical steel structures, Limit-states design principles
- Bending, shear and deflection: Design of flexural members without and with axial loads
- Tension members: Tension members in roof trusses
- Compression members: Design of compression members in trusses and as support members for trusses
- Bracing systems

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