

# MECH 5002 FUNDAMENTALS OF VERTICAL TRANSPORTATION SYSTEMS

**Credit Points** 10

**Coordinator** Baolin Wang ([https://directory.westernsydney.edu.au/search/name/Baolin Wang/](https://directory.westernsydney.edu.au/search/name/Baolin%20Wang/))

**Description** Vertical transportation, which includes lifts and escalators, has undergone significant changes over the last 10 years. This subject provides an overview of these changes and introduces current requirements that are essential for the safety and flow of people in and around different building types and systems. Students learn various technical and engineering aspects of vertical transportation systems and evaluate designs in relation to compliance with regulations and standards. Knowledge gained in this subject will benefit students aspiring to careers such as vertical transportation planning, design and installation.

**School** Eng, Design & Built Env

**Discipline** Mechanical and Industrial Engineering and Technology, Not Elsewhere Classified.

**Student Contribution Band** HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Postgraduate Coursework Level 5 subject

## Learning Outcomes

1. Analyse human circulation and human factors.
2. Justify selection of transportation systems for different building types.
3. Determine appropriate electrical power supply.
4. Evaluate vertical transportation designs and implementations for relevant regulations and safety in design principles.

## Subject Content

- human circulation
- human factors
- types of transportation systems
- escalator arrangement
- selection of equipment
- vertical transportation arrangement
- electrical power supply for vertical transportation
- safety in design principles

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/ Group Task
Applied Project	Up to 5 pages	20	N	Individual

Professional Task	2000-3000 words (including diagrams)	30	N	Individual
Report	Up to 10 pages	50	N	Individual

Teaching Periods

## Spring

**Parramatta City - Macquarie St**

### Composite

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View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=MECH5002\\_22-SPR\\_PC\\_C#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=MECH5002_22-SPR_PC_C#subjects))