

# MECH 5001 VERTICAL TRANSPORTATION TECHNOLOGY

**Credit Points** 10

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

**Description** As technology, architecture and building construction advance, vertical transportation systems must keep up to ensure best performance of systems in terms of safety, sustainability, passenger comfort and accessibility. This subject addresses the complexity of integrating systems to ensure best performance in specific contexts and for multiple stakeholders. Students work on projects and use computer-aided design (CAD) to develop design solutions that maximise performance while meeting requirements. In doing so, students further develop their technical and professional communication skills. Knowledge gained in this subject will benefit students aspiring to careers such as system, electrical and mechanical design of vertical transportation.

**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. Use software tools to design vertical transportation systems.
2. Produce professional reports demonstrating vertical transportation industry standards and meeting project deadlines.
3. Justify solutions and recommendations for designs.
4. Communicate with groups and individuals with awareness of diversity and ethics.

## Subject Content

- Appreciate principles into vertical transportation system design
- Design of vertical transportation systems with CAD
- Integrated electrical engineering in vertical transportation systems
- Integrated mechanical engineering in vertical transportation systems

## 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
Professional Task 1	up to 5 pages	20	N	Individual

Professional Task 2	2000-3000 words (including diagrams)	30	N	Individual
Report	up to 10 pages	50	N	Group

Teaching Periods