



Faculty of Engineering, Computer and Mathematical Sciences

LUNAR CONSTRUCTION GROUP PHD SCHOLARSHIP - MECHANICS OF LOAD RESISTING SYSTEMS FOR THE LUNAR ENVIRONMENT

Up for a challenge? Join us to work on a research project with the School of Civil, Environmental & Mining Engineering

At a Glance

Who can apply?

- Australian Citizens & Permanent Residents
- New Zealand Citizens
- Permanent Humanitarian Visa Holders
- International applicants

Industry partner or funding body

• The Adelaide Graduate Centre

Program of Study available

• Doctor of Philosophy (PhD)

Total annual stipend amount

• \$28 854pa (2022 rate, indexed)

Start date

• Plan for a start date of no later than 01/03/22.

About the project

The design of buildings and structures for future colony development on the moon will require efficient use of resources, requiring a careful balance between transporting materials from earth and the use of available in-situ materials. This topic will explore methodologies to design forms of structures to protect inhabitants of a lunar colony.

The project will research computational structural analysis and structural form finding techniques to design structural forms that exploit the properties of the materials available. The environment that any structures

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will be exposed to will need to be identified. The design actions will then be quantified and subsequently incorporated into an integrated structural analysis and form finding methodology specific to the lunar environment.

Eligibility criteria

- Applicants with strong command of mechanics and skills in computer programming for engineering applications will be considered favourably.
- Excellent students who hold a Masters of Civil Engineering or Bachelors with Honours would be especially suitable and encouraged to apply.
- Applicants with well-developed written and verbal communication skills will be considered favourably.

Benefits

- Access to authorised travel and research project funds available
- Work alongside world leading researchers in the interdisciplinary Andy Thomas Centre for Space Resources (https://ecms.adelaide.edu.au/at csr/), to gain exposure to a full spectrum of activity in both lunar construction and wider research in
- Our CaRST program: Free professional development to enhance your employability skills

Space activity.

- No Tuition fees! These are waived for eligible candidates
- Access state of the art technology
- Become a field expert and make a real and contribute to solving global challenges
- Publish your contributions and impact our communities and society.

How to apply

- Complete an <u>expression of interest</u> and email together with a copy of your CV and transcripts to <u>terry.bennett@adelaide.edu.au</u>
- Once your initial eligibility assessment is approved, formally lodge an application for admission and scholarship via the Adelaide Graduate Centre 'How to Apply' link.

Researcher Profiles

 Use our <u>Researcher Profiles</u> to find out more about potential supervisors

More about ECMS

The Faculty of Engineering, Computer and Mathematical Sciences is home to world-class research institutes and centres, and internationally renowned academics at the cutting edge of research and discovery.

We are a thriving centre of learning, teaching and research in a vast range of engineering disciplines, computer science, machine learning and highlevel mathematics as well as designing Human-centred, sustainable futures in our School of Architecture and Built Environments

Many of our academic staff are leaders in their fields and graduates are highly regarded by employers.

Learn more about the Faculty of Engineering, Computer and Mathematical Science's Research capabilities at:

https://ecms.adelaide.edu.au/researc h-impact

The University of Adelaide is an Equal Employment Opportunity employer. Women and Aboriginal and Torres Strait Islander people who meet the position requirements are strongly encouraged to apply.

FURTHER INFORMATION

For a confidential discussion contact:

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