Research Associate (Mechanical/Electrical/Power Engineering)
Nanyang Technological University

Job Title	Research Associate (Mechanical/Electrical/Power Engineering)
Department	Energy Research Institute @ NTU (ERI@N)
Institution	Nanyang Technological University Singapore, , Singapore
Date Posted	Dec. 4, 2025
Application Deadline	Open untill filled
Position Start Date	Available Immediately
Job Categories	Research Scientist/Associate
Academic Field(s)	Energy Technology Electrical and/or Electronics Mechanical Engineering
Apply Online Here	https://ntu.wd3.myworkdayjobs.com/Careers/job/NTU-Main-Campus-Singapore/Research-Associate--Mechanical-Electrical-Power-Engineering-_R00022793
Apply By Email	

Job Description

Established in 2010, the Energy Research Institute @ NTU (ERI@N) is a pan-university research institute that focuses on systems-level research for tropical megacities. It performs translational research that covers the energy value chain from generation to innovative end-use solutions, motivated by industrialisation and deployment. ERI@N has multiple Interdisciplinary Research Programmes which focus on translational Research, Development & Deployment which focus on specific area of the energy value chain, and a number of Living labs and Testbeds which facilitate large scale technology

Research Associate (Mechanical/Electrical/Power Engineering)
Nanyang Technological University

deployment enabling validation and demonstration of real-world applications.

For more details, please view https://www.ntu.edu.sg/erian

We are looking for a Research Associate to conduct numerical modelling work as well as to develop optimal control strategies for energy systems including building energy systems, energy storage systems and fire systems. The role will focus on conducting comprehensive data collection from both experimental and numerical sources, gathering relevant test and simulation data available globally, organizing the collected data to support model and control algorithm development and validation, and ensuring the accuracy and robustness.

Key Responsibilities:

- Identify credible data sources, standardize data formats, and integrate diverse datasets to enhance the reliability of simulations and predictions.

- Use cutting-edge methodologies such as A.I. and machine-learning to accelerate the numerical simulation processes.

- Develop optimal control strategies for energy systems

- Publish high-quality journal papers, conference papers and apply for TD/patents.

- Periodically provide updates on individual research progress to the PI and team members.

Job Requirements:

- Master's (for Research Associate equivalent) degree in mechanical/electrical/power engineering or related field

- At least 1 year of relevant experience in numerical simulations and control

-

Research Associate (Mechanical/Electrical/Power Engineering)
Nanyang Technological University

Familiarity with building energy system modelling tools (e.g. Matlab, Modelica, TRNSYS, FDS, OpenFOAM, etc.)

- Familiarity with experimental methods in building energy systems

- Good written and oral communication skills

- Proficiency in numeric and analytical skills

- Ability to work independently and develop solutions under strict timelines

We regret to inform that only shortlisted candidates will be notified.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

Singapore