

FAN Postgraduate Positions – Generic Advert

We have upcoming fully-funded PhD and Masters positions on the “Future Architecture of the Network” research programme, based at one of the following location (all in New Zealand):

- University of Canterbury (UC) in Christchurch
- University of Auckland (UA) in Auckland
- Auckland University of Technology (AUT) in Auckland
- University of Waikato (UoW) in Hamilton
- Victoria University of Wellington (VUW) in Wellington

All positions require a good understanding of electricity supply network. The PhD students will collaborate with the whole research team (from 5 different organisations in New Zealand and overseas partners) and with industry partners (local and international), and will be responsible for one key specific aspect of the research project.

The research project: Architecture of the Future Low-Carbon, Resilient, Electrical Power System or [Future of Architecture Network \(FAN\)](#). As part of the New Zealand government’s Strategic Science Investment Fund on Advanced Energy Technology, we are investigating what the future electrical power system might look like. Our main hypothesis is that high penetration of DC transmission and distribution (conveyance) into the AC grid will provide many benefits to transition to a low-carbon power system. The major research challenge is to determine the future architecture, topology and a transition pathway. For more information about the research programme and the research team, please check our website: <http://www.fan.ac.nz/>.

Qualifications (generic for all positions)

- Holds a Bachelor Honours or a master's degree in Electrical Engineering or a closely related field
- Good knowledge of power system grids and power electronics
- Experience with programming languages, e.g. MATLAB
- Familiarity with power system simulation tools e.g. PowerFactory DlgSILENT, PSCAD/EMTDC
- Excellent academic track record
- High proficiency in written and spoken English
- Enthusiastic applicants (any nationality) that want to make a positive impact in the world and can work in a collaborative environment
- Industrial or practical experience desirable

Check PhD and Masters Projects currently available on <https://www.fan.ac.nz/work-with-us.html>

For more information or other requests: futurearchitecturenetwork@canterbury.ac.nz
(applications by email will not be considered).