

Position title:	Post-Doctoral Fellow, Power Electronics
School/Directorate/VCO:	School of Science, Engineering and Information Technology
Campus:	Mt Helen or Gippsland Campus
Classification:	Within the Academic Level A6 - A8 range
Employment mode:	Fixed-term appointment
Probationary period:	This appointment is offered subject to the successful completion of a probationary period.
Time fraction:	Full-time
Recruitment number:	849186
Further information from:	Professor Syed Islam, Dean, School of Science, Engineering and Information Technology Telephone: (03) 5327 6726 E-mail: s.islam@federation.edu.au
Position description approved by:	Professor Syed Islam, Dean, School of Science, Engineering and Information Technology Professor Andy Smith, Deputy Vice-Chancellor (Academic)

This position description is agreed to by:					
Employee name	Signature	Date			

The University reserves the right to invite applications and to make no appointment.

Warning: uncontrolled when printed.

Authorised by:	Director, Human Resources	Original Issue:	01/11/2009
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#### **Position summary**

The Post-Doctoral Fellow, Power Electronics will to work in an interdisciplinary team to develop an IoT enabled PV grid connected inverter. It is also expected that the Research Fellow will contribute to other research activities within the School as directed by the chief investigators.

#### Key responsibilities

- 1. Complete research in Power Electronics applied to Renewable Energy as directed by the chief investigators.
- 2. Contribute to writing of technical reports and/or research publications.
- 3. Contribute to other research activities of the School as directed by the chief investigators.
- 4. Collaborate with partner investigators and research students to enable the research team meet milestones.
- 5. Contribute to the preparation of research findings leading to the publication of peer-review journal papers and the presentation of research findings in a variety of forums, including the graphical display of data.
- 6. Report and publish findings and present outcomes at local and national levels.
- 7. Contribute to the promotion of research links with external bodies.
- 8. Contribute to the administrative functions of the School as it relates to research.
- 9. Other responsibilities applicable to a Level A academic under current minimum standards for Academic Levels, as assigned by the Dean and Head of School/Deputy Dean.
- 10. Reflect and embed the University's strategic purpose, priorities and goals when exercising the responsibilities of this position. For a more complete understanding and further information please access the Strategic Plan at: https://federation.edu.au/about-us/ouruniversity/strategic-plan.
- 11. Undertake the responsibilities of the position adhering to:
  - The Staff and Child Safe Codes of Conduct and Conflict of Interest Policy and Procedure;
  - Equal Opportunity and anti-discrimination legislation and requirements;
  - the requirements for the inclusion of people with disabilities in work and study;
  - Occupational Health and Safety (OH&S) legislation and requirements; and
  - Public Records Office of Victoria (PROV) legislation.

#### Level of responsibility

The Post-Doctoral Fellow will carry out research under the direction of the chief investigators and will be expected to develop their expertise in research and administration with an increasing degree of autonomy.



#### Training and qualifications

A postgraduate qualification and a PhD in Power Electronics are required. Application to renewable energy systems is highly desirable.

#### Position/Organisational relationships

The Post-Doctoral Fellow will work under the general direction of the Chief Investigators of the project, and work as part of the School of Science, Engineering and Information Technology.

#### Key selection criteria

Applicants must demonstrate they are able to undertake the inherent responsibilities of the position as contained in the position description and are able to meet the following Key Selection Criteria:

- 1. A postgraduate qualification and a PhD in Power Electronics are required. Application to renewable energy systems is highly desirable.
- 2. Demonstrated knowledge on hardware power electronic prototyping. Experiences in hardware development particularly multilevel inverter prototyping is strongly desired
- 3. Demonstrated knowledge on digital control, DSP, and Photovoltaic applications.
- 4. Demonstrated research experience in the relevant area and evidence of high impact publication track record.
- 5. Demonstrated knowledge on Occupational Health and Safety requirements in a Power Engineering Laboratory
- 6. Demonstrated preparedness to undertake research and a capacity to develop an active research profile in the relevant field or related science.
- 7. A demonstrated capacity to contribute to supervision of Honour or Master degree student.
- 8. Demonstrated evidence of experience with the analysis of a range of data.
- 9. Demonstrated interpersonal, oral and written communications skills and an ability to relate well to students and other University staff.
- 10. Demonstrated alignment with the University's commitment to child safety.



### Minimum Standards for Academic Levels (MSALs)

Research academic staff

#### Level A

A Level A academic (research intensive) will work with the support and guidance from more senior academic staff and is expected to develop his or her expertise in research with an increasing degree of autonomy. A Level A academic (research intensive) will normally have completed four years of tertiary study or equivalent qualifications and experience and may be required to hold a relevant higher degree.

A Level A research academic will normally work under the supervision of academic staff at Level B or above, with an increasing degree of autonomy as the research academic gains skills and experience. A Level A research academic may undertake limited teaching, may supervise at undergraduate levels and may publish the results of the research conducted as sole author or in collaboration. He or she will undertake administration primarily relating to his or her activities at the institution.

The standards are not exhaustive of all tasks in academic employment, which is by its nature multiskilled and involves an overlap of duties between levels

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