<table>
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<th>Faculty:</th>
<th>Science</th>
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<tbody>
<tr>
<td>Project Name:</td>
<td>Distributed Energy Storage Management System</td>
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<tr>
<td>Department:</td>
<td>Engineering</td>
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<td>Closing Date:</td>
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<td>Allocation Number:</td>
<td>2013201</td>
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**Project Description (suggested maximum 200 words)**

A major emerging challenge for energy technology is the integration of distributed energy sources and energy storage systems into the existing power grid. Optimal integration on a large scale will require future energy systems to also be closely integrated with modern telecommunications technology, i.e. for both monitoring and control. Power systems with embedded communication and intelligence are commonly called “smart-grids”.

This project is to investigate and develop methods for implementing a highly scalable data collection and processing system by automated machine-to-machine (M2M) communications for future smart-grids. The specific application of interest is the integration of electric vehicles into the smart-grid, involving research and development on the implementation of highly scalable wireless M2M communication systems, and also on processing large amounts of dynamic data to predict the source/load on the electricity distribution grid associated with electric vehicles.

**Other Important information:**

This scholarship is available for both domestic and international students for up to four years (one year for MRes and three years for PhD).

**Contact Name:** Graham Town

**Contact Email:** graham.town@mq.edu.au

**Contact Phone:** 02 9850 9145

This scholarship is available to eligible candidates for:

- The Research Training Pathway (RTP) MRes (Year 2) program followed by a possible Macquarie University Research Excellence Scholarship (MQRES) for PhD (a MRes/PhD ‘bundle offer’).
- Direct entry to a 3 year PhD program.

Please refer to eligibility information at [MRes Fees](#) and [HDR Entry Criteria](#).

- The MRES Year 2 full-time stipend rate is $16,000 pa tax free for 1 year (for eligible MRES students)
- The MQRES full-time stipend rate is $25,392 pa (in 2014) tax exempt for 3 years (indexed annually).

To be eligible for a scholarship, applicants would be expected to have a record of excellent academic performance and preferably, additional relevant research experience and/or peer-reviewed research activity, awards and/or prizes in line with the University’s scholarship rating guidelines. Refer to [HDR](#).
Scholarship Requirements for more information about these guidelines.

Applicants will need to complete a candidature/scholarship application form and arrange for two academic referee reports to be submitted to the Higher Degree Research Office.

Refer to: Research Training Pathway Program Applications for MRES application instructions, and http://www.hdr.mq.edu.au/information_about/applications for PhD applications.

Macquarie University will advise the successful applicant of entitlements at the time of scholarship offer.

Please quote the allocation number on your application.