ASSET MANAGEMENT COUNCIL

THE UNIVERSITY OF ADELAIDE AUSTRALIA

ENGINEERS AUSTRALIA
South Australia Division

The Micycle – a self-balancing electric unicycle

Andrew Kadis, DSTO
David Caldecott, GPA Engineering

S111, Engineering South
The University of Adelaide
Thursday 10th November 2011
6:00pm for 6:30pm
Refreshments from 6:00pm (Mech. Staff Room)

Synopsis

In February 2010, a group of Honours students from the University of Adelaide began a project to design and build a self-balancing electric unicycle. The design encompassed elements of a unicycle, bicycle and Segway™. The *Micycle*, as it came to be known, possesses an innovative steering mechanism that offers a practical, viable solution to the *Last Mile Transport Problem*. It attracted a host of community attention and was awarded the Engineer's Australia *2010 Undergraduate Thesis Prize in Automation, Control, and Instrumentation*.

This presentation will tell the full story behind the *Micycle* from the conceptual design stage to the complete system. The mechanical steering system, a key feature of the design, will be discussed, along with the development and implementation of the control system. The complete *Micycle* will be presented along with a number of videos and a short demonstration.

All Welcome

RSVP (to assist catering): *Michael.Evans@ieee.org*

Supported by:

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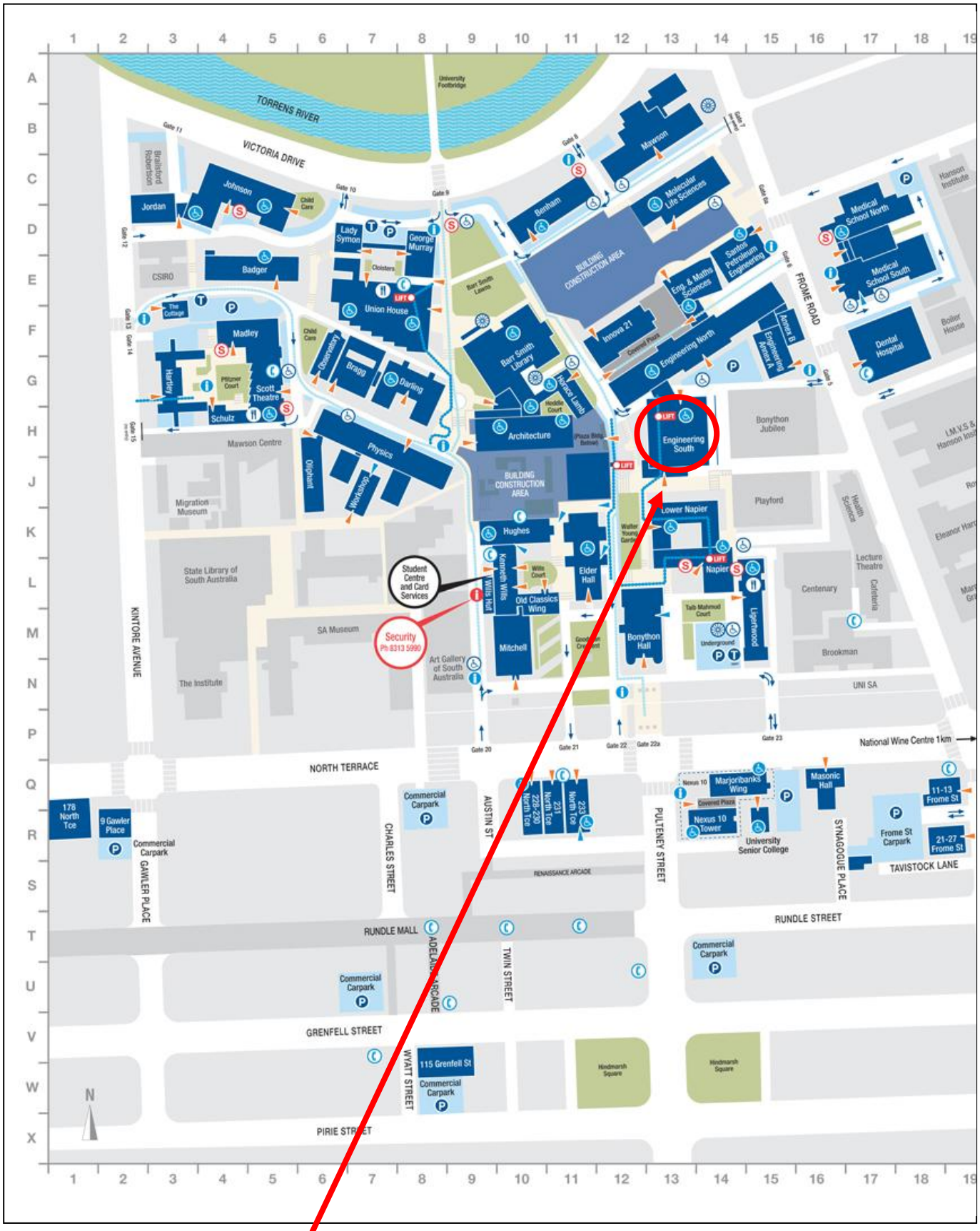

Engineering South
Lecture Theatre Rm 111
Enter from southern entrance on Level 1