



AUT

International Collaborations with the School of Computer & Mathematical Sciences: achievements and challenges

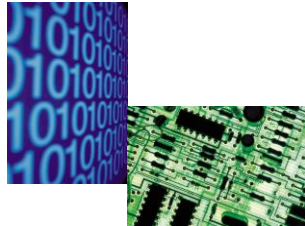
Dr Frances Billot, School Registrar

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Current International Partnerships for this paper:

- China Jiliang University, Hangzhou, PR China (CJLU)
- Vietnam National University, Ho Chi Minh City, Vietnam (HCMU) (since 2008)

SCMS Academic Disciplines



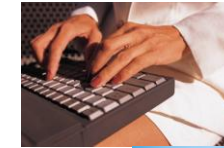
Computer Science

How computers work

How to make them work

What work they do

Computability Theory & Computational Practice



Mathematics and Statistics

Numerical methods & their applications

Algebra, Calculus and beyond

Inference and Probability

Tools for use in research and everyday life



$$ET_0 = \frac{s \cdot (R_x - G) + \gamma \cdot \frac{C_x}{T + 273} \cdot U_2 \cdot VPD}{s + \gamma \cdot (I + C_d \cdot U_2)}$$

What qualification?



- AUT Bachelor of Computer & Information Sciences (BCIS)
- IT Service Science major



How is it delivered?

- Delivery at the home university (Study Option 1).
- Transfer to AUT, Auckland, New Zealand (Study Option 2).



Study options: 1

- Teaching the BCIS at VNU/CJLU:
 - ‘Block’ teaching: 4-6 days + online + 4-6 days;or
 - 2 days + 1-2 days + online (VNU only);
 - supervised final year projects using local supervisors with AUT lecturer-led classroom sessions.
 - VNU over 1.5 years (120 credits: 6 papers plus Research & Development Project)
 - CJLU over 2 years (240 credits: 14 papers plus Research & Development Project)

Study option 2:



- At VNU or CJLU plus AUT Auckland
 - After two or three years at VNU or CJLU the student travels to New Zealand to complete the BCIS at AUT Auckland with a choice of major:
 - IT Service Science
 - Software Development
 - Networks & Security
 - Computational Intelligence
 - Computer Science
 - Analytics



Administration issues... and resolution



- Admission –
- Enrolment –
- Timetabling –
- Exams -
- Graduation –



Admission

- Students must meet entry criteria for an NZ University, including
- successful completion of their first year in their home university
- meeting English Language requirements



Admission issues

- Pressure from the partner university - due in part to their advertising
- Historic cases where IELTS was waived, 'to get the project started' – and the flow-on effect
- Close monitoring of student first year results required
- Dealing with a university that appears not to have robust processes
- **Solution/s?**
 - Establishing English language teaching
 - Keep to the Regulations.
 - Be tough. Very tough.



Enrolment and timetabling issues

- Term dates are different between AUT and the partner universities – a common issue between northern and southern hemisphere institutions.
- Student administration systems are different
- These affect the staffing and teaching contracts
- Academic staff volunteer to teach – accommodation and daily allowance are included.
- Some like the down-time away from home distractions to write.
- Staff are also contracted from an external company.



Solutions

- Setup separate enrolment cycles for each cohort with the collaborative partners on AUT's student administration system
- Employ a specialised administrator to work with the partner institutions.
- Room bookings are made through the partner university.
- Maintain an in-house spreadsheet system for academic staff workloads



Exams

- A spot check of exam management in China highlighted a few issues..
- around invigilation,
- room set-up,
- unauthorised collaboration between students.



Graduation

- Where to graduate?
- The students are graduands of both universities, and are named in AUT's Book of Convocation.
- In practice they are given the option of travelling to New Zealand for the first available AUT ceremony.
- One or two students are able to fund the travel and obtain visas
- Most have a graduation celebration at their home country university.
- These are well attended by senior political and diplomatic figures from both countries.

HCMU Ceremony and Graduation

Attended by Minister Steven Joyce and Ambassador Haike Manning and other VIPs



Graduation

This is the 5th graduating year

The 100th graduate was in this graduation (110 graduates to date)





Other challenges for Quality Assurance

- Delivery: organising teachers to travel without impacting on teaching commitments in Auckland.
- Chinese Ministry of Education restrictions
- Ensuring staff teach to AUT's published descriptors.
- Ensuring Chinese speaking staff deliver in English.



Why collaborate?

- Competition between universities does not necessarily deliver good outcomes – especially in a small country
- Diversity, and with that, capability
- Scale and capacity
- Partnerships that complement each other
- To increase growth and productivity in the sector
- To accelerate formation of new technologies



Measuring success: Academic

- Graduation, Winter 2015:
- 20 graduands from HCMU, Vietnam
- 53 graduands from CJLU, PR China



Pathway to Postgraduate programmes

- At AUT (1.5 – 2 yrs)
 - Master of Analytics
 - Master of Computer & Information Sciences (MCIS)
 - Master of Service Oriented Computing (MSOC)
 - Master of Health Informatics (MHI)
 - Master of IT Security & Digital Forensics (MISDF)
- At VNU (proposed)
 - Master of Computer & Information Sciences



Students in postgraduate programmes

- HCMUS Vietnam:
 - MSOC x 1 (completed)
 - MCIS x 1 (completed)
- From CJLU:
 - MCIS x 1 (just started)
- Other partners:
 - From Hanoi U
 - PhD in progress x 1
- From Binus Indonesia
 - MCIS application-in-process x 1

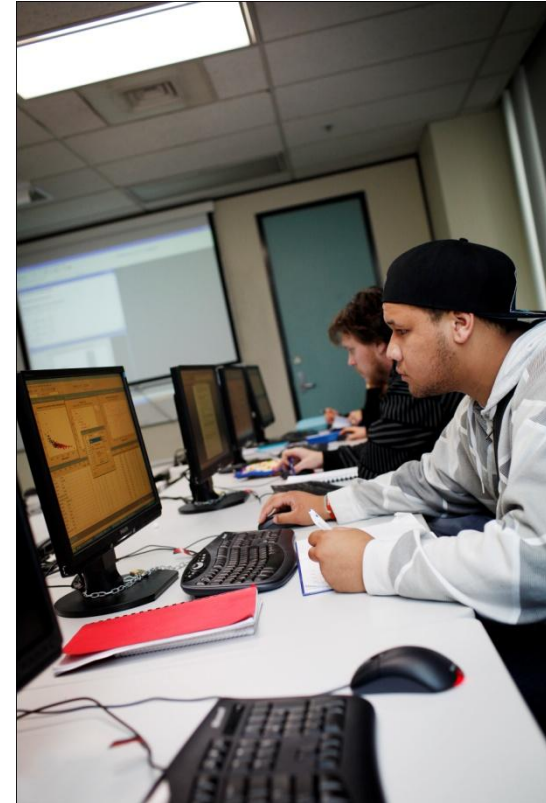


Successes and benefits

- Academic collaboration – research projects
- Conferences and publications (e.g. FICAP)
- Financial benefit of using existing infrastructure of a local institution
- Social benefit

Measuring success: financial

- BCIS: Approx. 800 EFTS in Auckland
- 300+ in China
- 280 in Vietnam



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Thank you for listening