
Multistage Quality Checks in Designing, Developing and Delivering Computing Degrees

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Abstract

In this poster paper, the quality checks required at the different stages of designing, developing and delivering computing degrees at a New Zealand Institute of Technology are reviewed. These quality checks are both internal and external to the institution and are for undergraduate and post graduate degrees. The multiple quality checks required ensure that any degree that is approved has undergone, and continues to undergo, rigorous scrutiny.

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Keywords

Computing, degrees, quality

Introduction

In New Zealand, degree programmes are provided by government training establishments (institutes of technology, polytechnics, universities and wananga) and by private training establishments (PTEs). Non-university training establishments in New Zealand wishing to offer degrees are subject to multiple quality checks, most of which are mandated by the New Zealand Qualifications Authority (NZQA), which approves the degrees and accredits the training establishments. Unitec offers three computing degrees: Bachelor of Computing Systems (BCS), Master of Computing (MComp) and Doctor of Computing (DComp). This paper describes the quality checks applied to these degrees.

Quality Checks

There are three distinct stages in the development and delivering of a degree programme that require quality checks both internal and external. The first stage is the design and development of the programme. During this stage the majority of the quality checks are all internal. The next stage is the approval and

accreditation of the degree programme and the main checks here are external. The third stage is the delivery of the degree and at this stage the quality checks are both internal and external.

Design and Development

The first stage in the design and development of a degree programme is the market analysis and business case. This is checked internally by the senior management of the institution (Joyce 2002). Once approval is gained to proceed, the academic development team prepares the documentation which is checked both internally by the institution and externally by consultation with the industry.

Approval and accreditation

The NZQA appoints a panel of seven: six external and one internal academic from another department. The panel members read the documentation then visit the institution to view the facilities and resources and talk to the academic staff, senior management and other staff as required. Their written report is then sent to the institution and they make a recommendation to the NZQA Board. Approval is for the viability and rigour of the programme and accreditation is for the ability of the institution to teach it to the required standard.

Moderation, Monitoring and Review

Assessments of all degree courses undergo both internal and external pre- and post- moderation. This process must be described in the programme regulations and adhered to. A panel of four internal academics assesses DComp assignments and presentations. Internal and external academics moderate samples of marked BCS and MComp

assignments and BCS examination scripts. An external academic moderates all DComp assignments and MComp and DComp theses are examined by external examiners. All degrees are monitored on an annual basis by an external academic.

All programmes are also required to undergo a five year review. This involves both internal and external panel members who review a comprehensive self-evaluation report and make recommendations and/or requirements for the continuance of the programme. Feedback from students by way of anonymous course and lecturer evaluations is also reviewed.

Conclusion

Academics in New Zealand institutes of technology often complain about the multiple quality checks, but can be confident that the quality of their degrees has been very thoroughly checked. Some of the quality checks (e.g. those for thesis examinations) are similar to those used in New Zealand and overseas universities but others (e.g. those for monitoring and external moderation of assignments) do not seem to be applied in New Zealand universities.

References

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