

## Appendix A (Course Descriptors)

### ISCG6423: Database Design and Development

Course number: 6423  
Main programme: BCS  
Endorsement:

Level:6

Credits: 15  
Delivery:  
Hours directed:  
32.5  
Hours self-  
directed: 117.5  
Total hours: 150

Other programmes: GDCMP

Prerequisites: For BCS  
& GDCMP:  
ISCG5421  
(ISCG5239) and  
ISCG5423 (ISCG5236)

Number of weeks: 16 weeks

Restrictions: None  
Entry requirements:  
None

Students are expected to adhere to United's policy on conduct in respect of staff, fellow students, and in the use of resources and facilities.

#### NZQA Level Descriptor: (chosen from table presented above in section 2)

Knowledge	Skills	Application
<p>The student is able to carry out processes that</p> <ul style="list-style-type: none"> <li>require a command of wide-ranging highly specialised technical or scholastic skills</li> <li>involve a wide choice of standard and non-standard procedures, often in non-standard combinations</li> <li>specialised knowledge with depth in more than one area</li> </ul>	<ul style="list-style-type: none"> <li>the analysis, reformatting and evaluation of a wide range of information</li> <li>the formulation of appropriate responses to resolve both concrete and abstract problems</li> <li>are employed in highly variable routine and non-routine contexts employing</li> </ul>	<p>and applied</p> <ul style="list-style-type: none"> <li>in managing processes</li> <li>within broad parameters for defined activities</li> <li>with complete accountability for determining and achieving personal and/or group outcomes.</li> </ul>

#### Course aim:

To apply the principles of data management with database technology.

#### Learning outcomes:

1. Explain the role of a DBMS within a business.
2. Produce a conceptual data model for a given set of requirements.
3. Develop a logical database design for a given set of requirements and for a given conceptual design.
4. Implement a physical database design from a given logical design.
5. Build and test a database application containing forms and reports that demonstrates understanding of how business needs can be met by interaction with a given database
6. Demonstrate understanding of usability issues in Database Management.
7. Explain trends in the use of databases for business problem solving.