ISCG6425 Data Warehousing

Course number:	ISCG6425	**Level:** 6	**Credits:**	15
Main programme:	BCS		**Delivery:**	One Semester
Pathway:	Data Engineering		**Hours directed:**	32.5
Other programmes:	GDCMP		**Hours self-directed:**	117.5
Prerequisites:	ISCG5423		**Total hours:**	150
Co-requisites:			**Number of weeks:**	16 weeks
Restrictions:				
Other:				

Students are expected to adhere to Unitec's policy on conduct in respect of staff, fellow students, and in the use of resources and facilities. Students are required to attend 100% of all scheduled classes.

NZQA Level 6 Descriptor:
Level descriptor: The student is able to carry out processes that

- require a command of wide-ranging highly specialised technical or scholastic skills
- involve a wide choice of standard and non-standard procedures, often in non-standard combinations
- are employed in highly variable routine and non-routine contexts

employing

- specialised knowledge with depth in more than one area
- the analysis, reformatting and evaluation of a wide range of information
- the formulation of appropriate responses to resolve both concrete and abstract problems

and applied

- in managing processes
- within broad parameters for defined activities
- with complete accountability for determining and achieving personal and/or group outcomes.

Integrate
Estimate
Compare
Contrast
Differentiate

Course aim:
To introduce students to concepts of data warehousing and decision-making, data warehouse design and implementation, data sourcing and data quality, Extract-Transform-Load (ETL) procedure, and on-line analytical processing (OLAP). Students will gain hands-on experience using Microsoft SQL server for implementing data warehouses.

Learning Outcomes:

1. Demonstrate knowledge of data warehouse architecture, schema, and data modelling
2. Demonstrate knowledge of ETL, data integration and data quality
3. Demonstrate understanding of decision making process
4. Demonstrate knowledge and usage of OLAP, data cubes
5. Implementing SQL in data warehouse environment
6. Use data warehousing tools for implementing data warehouses

Topics:

- Data warehouse architecture and schema