



## MODULE SPECIFICATION

Part 1: Information			
Module Title	Systems Analysis and Databases		
Module Code	UFCFQE-30-1	Level	Level 4
For implementation from	2018-19		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Contributes towards	Applied Computing [Sep][PT][UCW][3yrs] FdSc 2018-19 Applied Computing [Sep][FT][UCW][2yrs] FdSc 2018-19		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p><b>Educational Aims:</b> See Learning Outcomes</p> <p><b>Outline Syllabus:</b> Techniques for conducting systems investigation, e.g. interviews, observation, questionnaires, document gathering...etc.</p> <p>The current methodologies available for analysing and designing systems, e.g. Prototyping, DSDM, RAD.</p> <p>UML modelling.</p> <p>Advantages and disadvantages of a case tool.</p> <p>Problems of traditional file based approaches to data access.</p>

## STUDENT AND ACADEMIC SERVICES

Database terminology and normalization technique.

DBMS as a layer between the user and the data.

Facilities of a DBMS, SQL, DML and DDL.

The 3-layer SPARC model for DBMS.

Physical, logical and external schemas.

Implement and test external schemas for a relational database

**Teaching and Learning Methods:** 300 hours study time of which 108 hours will represent scheduled learning.

Scheduled learning will typically include lectures, seminars, supervision and an interactive forum.

All students are expected to attend a series of tutorials.

Introductory lectures (25%) are supported by seminars, case studies, visits (15%) and practical workshops (60%). In addition this module will be supported by interactive forums and learning tools.

192 hours research, independent study and preparation for assessment work: Independent learning includes hours engaged with reading, assignment preparation and completion. Student study time will be organised each week with a series of both essential and further readings and preparation for practical workshops.

### Part 3: Assessment

A range of assessment techniques will be employed to ensure that learners can meet the breadth of learning outcomes presented in this module alongside the ability to demonstrate transferable skills e.g. communication skills.

Examination: To demonstrate an understanding of the underlying concepts of systems analysis and their application to real-world development situations.

Time-constrained assessment: Analysis of a business problem and design of a solution. Students must produce a model for the proposed system based on their data requirements.

Implementation, Testing and Evaluation of a database solution The task will include implementation, testing and evaluation of a database solution. Students will produce the database and suitable accompanying documentation e.g. user guide.

Opportunities for formative assessment exist for the assessment strategy used. Verbal feedback is given and all students will engage with personalised tutorials setting SMART targets as part of the programme design.

First Sit Components	Final Assessment	Element weighting	Description
Set Exercise - Component B	✓	60 %	Implementation, Testing and Evaluation of a Database Solution
In-class test - Component A		24 %	Time-constrained assessment (2.5 hours) in-class
Examination - Component A		16 %	Examination (1.5 hours)

## STUDENT AND ACADEMIC SERVICES

Resit Components	Final Assessment	Element weighting	Description
Set Exercise - Component B	✓	60 %	Implementation, Testing and Evaluation of a Database Solution FINAL ASSESSMENT
Set Exercise - Component A		24 %	Time-constrained assessment (2.5 hours)
Examination - Component A		16 %	Examination (1.5 hours)

Part 4: Teaching and Learning Methods																			
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Reading List	<p>The reading list for this module can be accessed via the following link:</p> <p><a href="https://uwe.rl.talis.com/index.html">https://uwe.rl.talis.com/index.html</a></p>																		