

Module Title	Database and Information Systems	School	MACS				On or Off-Campus	On	
Module Co-ordinator	Phil Trinder	SCQF Level	11	Module Code	F21DF	Semester	1	Credits	15

1. Pre-requisites	Undergraduate experience of database technologies, at least at application level. Numerate background.								
2. Linked Modules (specify if synoptic)	None								
3. Excluded Modules	None								
4. Replacement Module	Code:			5. Availability as an Elective		Yes <input type="checkbox"/>		No <input checked="" type="checkbox"/>	
	Date Of Replacement:								
6. Degrees for which this is a core module	Optional module for MSc IT (software systems), MSc IT (business) MSc Intelligent Web Technology, MSc Computer Systems Management								
7. Aims									
<ul style="list-style-type: none"> To equip students with a detailed and critical understanding of the processes and methodologies required for the analysis, specification and design of database systems and information systems, and the inter-relationship between such systems. To enable students to develop a critical understanding of the relationship between organisations, human activity systems and information systems, and to utilise that understanding to design and develop appropriate specialised systems. To provide the students with practical experience in designing, building and using databases, and critical awareness in the development and deployment of databases and information systems within organisations. 									
8. Syllabus									
<p>Introduction to Information Systems; Case Study – Sir Edward Kelly; Domain and Types of Information Systems; Databases and Database Management System Concepts; Data Modelling & Database Design; Relational Data Model SQL Language and Constructs; Database connectivity Emerging database technologies: e.g .XML, Data Warehousing, alternative database models</p>									

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9. Learning Outcomes (HWU Core Skills: Employability and Professional Career Readiness)

Subject Mastery	<p><i>Understanding, Knowledge and Cognitive Skills</i> <i>Scholarship, Enquiry and Research (Research-Informed Learning)</i></p> <ul style="list-style-type: none"> ◆ Extensive, detailed and critical understanding of the nature, scope and boundaries of data models and database management systems, in relational and XML paradigms. ◆ Both theoretical and practical knowledge of methodologies for specification and design of databases. ◆ Skill in the use of software tools and languages for database design, development and management. ◆ A critical understanding of and practical skills in interfacing DBMS and programs ◆ A critical understanding of emerging database technologies
Personal Abilities	<p><i>Industrial, Commercial & Professional Practice</i> <i>Autonomy, Accountability & Working with Others</i> <i>Communication, Numeracy & ICT</i></p> <ul style="list-style-type: none"> ◆ Taking responsibility for own work, taking responsibility in the development of resources, critical reflection on development process and work undertaken by self. ◆ Critical analysis, evaluation and synthesis of current database and information system technologies leading to original and creative response to design task. ◆ Effective communication in electronic and written report form.

10. Assessment Methods				11. Re-assessment Methods	
Method	Duration of Exam (if applicable)	Weighting (%)	Synoptic modules?	Method	Duration of Exam (if applicable)
Exam	2 hours	80		Exam	2 hours
Coursework		20			

12. Date and Version							
Date of Proposal	29/06/2009	Date of Approval by School Committee		Date of Implementation	Sep 2009	Version Number	1.1