

MSc Internet and Database Systems

This course focuses on e-business collection & processing of information from various sources and the management of records using Web-Database applications. Websites are supported by databases in several ways including: maintaining information published on websites, tracking users and customers of the site, storing geo-tagged data etc. The information stored in databases is a valuable asset which the organisation is dependent upon, and the protection of that information is a key issue.

On course completion, you will:

- appreciate and critically evaluate the impact of database and internet technology on e-business
- identify and formulate information related problems and, where appropriate, deliver an information system using web and database technologies
- be able to appreciate the security and privacy issues and the implications on e-business
- be able to undertake research in the field of database and web integration.

Course modules (in brief)

- **Database Management (20 credits)**
 - You will learn advanced concepts and research issues in database technology. Database design and implementation, database extensions (XML) & connectivity and object-relational databases. Developing an appreciation of the complexity of the modern database development environment.
- **Network and communications software (20 credits)**
 - You will learn to advise business organisations on the design and construction of networked business IT systems both to host applications for their databases within the fixed computing domain and to distribute them to the internet and mobile devices.
- **Object Systems Design (20 credits)**
 - You will learn object-oriented model-based systems design, considering its relationship to contemporary software development methodologies and its close integration with software implementation through UML design tools.
- **Project management principles (10 credits)**
 - You will learn the quantitative methods you will need to manage software projects. Reviewing strategies for selecting, initiating and controlling IT and infrastructure projects. Assessing risk management, planning and scheduling issues and improving project success rates. You will be introduced frameworks such as PERT and PRINCE2.
- **Research processes and investigative methods (10 credits)**
 - You will learn a range of investigative techniques, together with their limitations and applicability's. Introducing the importance of grounding investigations within established knowledge.
- **Professional development (10 credits)**
 - You will learn a range of core skills that will support your transition into a chosen career and assist in managing and developing the progress thereof within the discipline of Information Technology.
- **Preparation for Project (10 credits)**
 - You will learn to develop the essential skills required to plan, monitor, control and deliver a successful dissertation project..
- **Project (60 credits)**
 - The Dissertation Unit requires completion of a Masters level dissertation in an area consistent with, and appropriate to the degree being sought. It provides an opportunity for you to independently conceive, plan and execute an appropriate piece of research based on firm academic foundations.

Optional modules

Choose one from the following:

- **E-business applications (20 credits)**
 - You will learn to develop web based applications using a variety of tools. We will investigate the use of point-and-click programming and content management systems. You will look at the social environmental context of developing systems to ensure suitability for purpose.
- **Data mining and business analytics (20 credits)**
 - You will learn data mining concepts, methodologies, and tools. You will develop an understanding about the need for data mining, the nature of data mining, benefits resulting from data mining, and its role in business analytics. Solving real-world data mining problems by using appropriate software suites. SAS[®] Enterprise Miner and SAS[®] Enterprise Guide will be taught and used for this purpose.
- **Managing mobile technologies (20 credits)**
 - You will learn both the theoretical and prescriptive knowledge to appraise the use and integration of mobile computing, wireless networks, mobile technology and mobile business applications within the business systems domain.

Course mode and length

Full-Time - 1 year (LSBU code 2116); Part-Time - 2 years (LSBU code 2115)

The delivery structure of full-time and part-time MSc IDS course is as follows:

MSc Internet and Database Systems							
Full-time							
Semester 1				Semester 2			
Day 1		Day 2		Day 1		Day 2	
Database Management (20)	Project Management Principles (10)	Networks and Communications Software (20)	Research Processes and Investigative Methods (10)	Object Systems Design (20)	Professional Development (10)	Data Mining (20) E-business (20) Managing Mobile Technologies (20)	Preparation for Project (10)
Part-time Year 1		Part-time Year 2		Part-time Year 1		Part-time Year 2	

Career and progression opportunities

Employment prospects are excellent. Graduates typically enter positions such as: information architect, business intelligence specialist, database administrator and business systems analysts/developer. The course provides a direct path to Doctorate (PhD) level research within the Faculty.

Entry requirements

An honours degree (2:2, or equivalent) graduate from a UK or international university, or mature applicants, minimum three years working in appropriate related environments.

How to apply

To apply to any of our full time postgraduate taught courses you should use the online system provided by the UK Postgraduate Application and Statistical Service (UKPASS).
<https://pgapp.ukpass.ac.uk/ukpasspgapp/login.jsp>