



Course information 2011–12

IS1060 Introduction to information systems

This course is intended to provide a broad introductory understanding of information systems.

Prerequisite

None apply.

Exclusion

May not be taken with IS1136
Information systems and
organisations.

Aims and objectives

This course is intended to provide a broad introductory understanding of information systems, seen within organisational and societal contexts. The aim is to provide students with an appropriate balance of technical and organisational perspectives to serve as the basis for further study in the field.

Essential reading

For full details please refer to the reading list.

Laudon, K.C. and J.P. Laudon.

Management Information Systems: Managing the Digital Firm. (New Jersey: Prentice Hall).

This text is updated regularly.

Please buy the latest edition available.

Assessment

This course is assessed by a three hour unseen written examination and coursework.

Learning outcomes

At the end of this course and having completed the essential reading and activities students should be able to:

- ✓ explain the fundamental principles and assumptions of studying the application of information and communications technologies in terms of information systems (rather than as simply technical apparatus)
- ✓ apply these principles to study a number of practical business and administrative information systems within real organisations
- ✓ discuss the social, organisational and economic context of computer use and debate the impact of information and communication technologies on the economy and society
- ✓ discuss the history of the development of information and communication technologies and describe some of the emerging consequences for organisations
- ✓ express a basic logical understanding of how a computer system works, and its principal structures and components including contemporary technologies for data input, data output, data storage
- ✓ describe the principal technologies used in data transmission (networks), including the basic functions and architecture of the Internet
- ✓ explain the various functions of systems software (operating systems), language translators and various classes of task-oriented application packages
- ✓ explain the main tasks that need to be undertaken in preparing for the establishment of a new information system in terms of the systems development life cycle and with an appreciation of alternative system development methodologies and tools
- ✓ describe and justify a range of professional roles in information systems development activity
- ✓ demonstrate, through a project, experience in the analysis and design of small projects using database and spreadsheet programs, and the ability to write brief but informative reports on such work.

Syllabus

This is a description of the material to be examined, as published in the *Regulations*. On registration, students will receive a detailed subject guide which provides a framework for covering the topics in the syllabus and directions to the essential reading.

Information systems concepts: The socio-technical character of information systems. Notions of information, and data. Capture of data, storage and display. Information processing. Introduction to systems ideas and their application to information handling activities.

Information Systems within organisations: The roles and functions of information systems within organisations including providing management information, supporting knowledge work and undertaking transaction processing. Use of information in organisations and by various types of people and as applied to various types of task. Issues of information systems management in business and public administration and at a national policy level. Students are expected to undertake small case studies of information systems within local organisations.

Information and communications technologies: Review of the development of information and communication technology. Introduction to computer hardware and software. Representation of data in computer systems, files and databases. Operating software, applications packages and user written programmes. Communications technologies and networks. The Internet.

Systems development: The information systems development life cycle – feasibility, analysis, design, construction, changeover and operation. Introduction to structured development methodologies, prototyping and other alternative approaches. Data Modelling. Criteria for successful applications development. Professional roles in systems development. End user computing. Changeover to new ways of working and issues of the management of change.

Practical coursework: Introduction to software packages. The following types of packages are the basis for the required coursework: spreadsheet, word processor, database. No specific packages are required to be used, but typical examples would be Excel for spreadsheets, Word for wordprocessing, and Access for databases. In the coursework students are expected to demonstrate and document their ability to analyse and design small applications, as well as their mastery of the software. Coursework undertaken with these packages counts for 25 per cent of the overall mark.

Note: Candidates taking this paper are required to submit coursework.

Students should consult the *Programme Regulations for degrees and diplomas in Economics, Management, Finance and the Social Sciences* that are reviewed annually. The Prerequisites, Exclusions, and Syllabus are subject to confirmation in the *Regulations*. Notice is also given in the *Regulations* of any courses which are being phased out and students are advised to check course availability.