

ES9I4-10 Enterprise Information Systems

21/22

Department

WMG

Level

Taught Postgraduate Level

Module leader

Mark Bonnett

Credit value

10

Module duration

1 week

Assessment

100% coursework

Study locations

University of Warwick main campus, Coventry Primary

Distance or Online Delivery

Description

Introductory description

The purpose of the module is to introduce students to the discipline of information systems and in particular the complexities and challenges of their management in an enterprise context. In particular, the module seeks to explore current best practices in the development and management of critical enterprise information systems and their integration with other systems, and with business process. In particular, the module provides a detailed and comprehensive evaluation of key technologies such as cloud based solutions, enterprise resource planning, digital applications, and the opportunities these tools and architectures can offer. These issues will be explored from a technical, an organisational and, most importantly, a strategic perspective.

Module aims

The module focuses on the technical challenges of developing and integrating enterprise solutions, along with the process changes and opportunities for re-engineering they can offer. These issues will be explored from a technical, an organisational and, most importantly, a strategic perspective. The module culminates in a capstone project, where students working in teams will simulate a realistic enterprise information systems setting. In the project, participants will seek to

capture a set of realistic business requirements, develop an overall architecture, and then detail two specific project initiatives. The first will be a scenario where an appropriate COTS (commercial off the shelf) or open source solution would be selected (which meets the business' requirements) from a set of appropriate alternatives. The second is to provide a high-level design of a new system, that again can meet the business requirements but for a different part of the initiative.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

1. Key Concepts of Enterprise Information Systems

- a. What are Enterprise Information Systems?
- b. Technical architecture (hardware, middleware and software)
- c. Networking and security

1. Enterprise Information System Management and Practice

- a. IT organisational roles
- b. Data management and information architecture
- c. Data and information governance
- d. Business continuity and disaster recovery
- e. Enterprise resource planning

1. Cloud Computing

- a. Fundamentals of cloud architecture
- b. Cloud migration strategies
- c. Continuous integration and continuous delivery
- d. Cloud native computing

1. Application and System Development

- a. Agile project management and DevOps
- b. Solution design
- Testing and deployment strategies

1. Solution Selection

- a. Requirements elicitation and user stories
- b. Evaluation and prioritisation of available solutions
- c. Change management

1. Capstone Project - a practical simulation of the above topics.

Learning outcomes

By the end of the module, students should be able to:

- Demonstrate a comprehensive understanding of the practices of enterprise information systems in modern business
- Critically analyse the systematic and operational risk associated with an enterprise's information architecture, and develop appropriate mitigation and management strategies
- Critically evaluate a range of real-world IT solutions, and determine their applicability and suitability to a range of different use cases
- Interpret complex business requirements and develop appropriate, higher-level solution and architecture designs

Indicative reading list

[View reading list on Talis Aspire](#)

Subject specific skills

IT architecture, ERP, agile, DevOps, cloud computing, business intelligence, networks, virtualisation, outsourcing

Transferable skills

Presentation skills, research, teamwork, IT architecture, critical thinking

Study

Study time

Type	Required
Lectures	14 sessions of 1 hour 30 minutes (21%)
Seminars	10 sessions of 1 hour 30 minutes (15%)
Online learning (independent)	5 sessions of 1 hour (5%)
Assessment	59 hours (59%)
Total	100 hours

Private study description

No private study requirements defined for this module.

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group A1

	Weighting	Study time
Assessed work as specified by department	100%	59 hours
Post Module Work (4000 words); In-Module Work (presentation)		

Feedback on assessment

In module work will have feedback provided verbally after assessment. PMA – individual notes attributed to each script returned to each student with bespoke feedback.

Availability

Courses

This module is Optional for:

- Year 1 of TESS-H1ZW Postgraduate Taught Programme and Project Management
- TESS-H7PT Postgraduate Taught Programme and Project Management (Hong Kong)
 - Year 1 of H7PT Programme and Project Management (Hong Kong)
 - Year 1 of H7PT Programme and Project Management (Hong Kong)
- Year 1 of TESA-H7PK Postgraduate Taught e-Business Management

This module is Core option list B for:

- Year 1 of TESS-H1PT Postgraduate Taught Engineering Business Management (Awarded Jointly with Hong Kong Polytechnic Uni)

This module is Core option list C for:

- Year 1 of TWMS-H7BF Postgraduate Supply Chain and Logistics Management (Hong Kong)
- Year 1 of TWMS-H7BG Postgraduate Supply Chain and Logistics Management (awarded jointly with Hong Kong Polytechnic University)
- Year 1 of TESS-H7PE Postgraduate Taught Supply Chain and Logistics Management (Overseas and Self-Financing)
- Year 1 of TWMS-H7A1 Postgraduate Taught Supply Chain and Logistics Management (Singapore)

This module is Option list A for:

- Year 1 of TESS-H1PU Postgraduate Taught International Technology Management
- Year 1 of TESS-H6C4 Postgraduate Taught International Technology Management (Hong Kong)

This module is Option list B for:

- Year 1 of TESS-H1P2 Postgraduate Award in Engineering Business Management
- Year 1 of TESS-H1X0 Postgraduate Award in Taught Engineering Business Management (Hong Kong)
- Year 1 of TESA-H1P7 Postgraduate Taught Engineering Business Management
- Year 1 of TESS-H1P1 Postgraduate Taught Engineering Business Management
- Year 1 of TESS-H1P3 Postgraduate Taught Engineering Business Management (Hong Kong) Warwick Award
- Year 1 of TESS-H1PS Postgraduate Taught Engineering Business Management (Singapore)
- Year 1 of TESS-H1X6 Postgraduate Taught Programme and Project Management
- Year 1 of TWMS-H1Y8 Postgraduate Taught Service Management and Design
- Year 1 of TWMS-H1Y9 Postgraduate Taught Service Management and Design (Hong Kong)
- Year 1 of TESS-H7PL Postgraduate Taught e-Business Management

This module is Option list C for:

- Year 1 of TESA-H7PD Postgraduate Taught Supply Chain and Logistics Management (Home Fees)