

WM261-15 Information Systems for Business Processes

24/25

Department

WMG

Level

Undergraduate Level 2

Module leader

Sheri Sankey

Credit value

15

Module duration

14 weeks

Assessment

100% coursework

Study locations

University of Warwick main campus, Coventry Primary

Distance or Online Delivery

Description

Introductory description

WM261-15 Information Systems for Business Processes. This module aims to enable students to become familiar with the Information Systems in organisations, their architecture, their use, their design, and their implementation.

[Module web page](#)

Module aims

Apprentices need to understand information systems, and the way they operate in business, including the underlying tools and techniques of business analysis - in particular assessing and upgrading capability.

Apprentices will explore different types of information systems, their functions, and the various roles related to information systems, enabling apprentices to distinguish between types of IS environments and options. By learning to assess organizational capability and the methods by which change can be identified, apprentices will be able to apply change principles to their

workplace recommendations.

A change to business will be introduced, and apprentices will need to develop a business case to deliver that change, using the skills developed in requirements identification, understanding the value in the proposed business change, and learning to present the benefits of making changes to a working environment. This must include sustainability and any sensitivities to address issues around legal, moral and ethical organisational behaviour. Apprentices will also have the opportunity to identify potential improvements in the workplace and present these for consideration.

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.

- Introduction to Information Systems
- Business Strategy and its impact on IS provisions
- Hardware and Software
- Types of data and Information
- Types of Information Systems
- The Changing Roles of Information Systems
- Information systems architectures
- Critical Success Factors
- Change Management
- Strategic Alignment and Planning
- Systems Architecture
- Requirements elicitation
- IT Investment and Acquisition
- Problem solving in business using IS
- Professional, social and ethical issues in information systems.
- Roles and Responsibilities in IS
- Innovation in IT
- Effect of emerging technologies on business strategy
- IT trends and issues
- The Business Case

Learning outcomes

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

- Analyse the various roles, functions and activities related to information systems within an organisation using robust research. [(AHEP: C4) (CITP: 2.1.3, 2.1.6, 2.1.13)]
- Evaluate how well a business understands its capabilities and the changes required to improve them. [(AHEP: C5, C7, C9) (CITP: 2.1.5, 2.1.6, 2.1.10, 2.1.13)]
- Strategically plan a sustainable digital technology solution acquisition identifying resources, key risks and conveying different acquisition options to key stakeholders. [(AHEP: C4, C5, C11) (CITP: 2.2.4, 2.2.5, 2.2.6)]

- Create a value plan to a moderately complex technology-oriented solution using industry standard requirements elicitation techniques supported by evidence. [(AHEP: C4, C12, C17) (CITP: 2.2.4, 2.2.5, 2.2.6,)]
- Deliver a preliminary business case for the implementation of a competitive technology solution including estimation of costs, benefits and key sensitivities. [(AHEP: C4, C5, C7, C9) (CITP: 2.2.4, 2.2.5, 2.2.6)]

Indicative reading list

- B. Paul, “Business information systems: technology, development and management for the e-business”, Pearson, 2015. ISBN: 9780273736455.
- P. Beynon – Davies, “Business information systems”, Palgrave MacMillan 2013, ISBN: 9781137265807.
- P. Bocji, “Business information systems”, FT Prentice Hall, 2008, ISBN: 9780273716624.

[View reading list on Talis Aspire](#)

Subject specific skills

B5: Interacts professionally with people from technical and non-technical backgrounds. Presents data and conclusions in an evidently truthful, concise and appropriate manner.

S2: Identify risks, determine mitigation strategies and opportunities for improvement in a digital and technology solutions project.

S9: Apply relevant security and resilience techniques to a digital and technology solution. For example, risk assessments, mitigation strategies.

S13: Report effectively to colleagues and stakeholders using the appropriate language and style, to meet the needs of the audience concerned.

K2: The principles of strategic decision making concerning the acquisition or development of digital and technology solutions. For example business architecture approaches such as capability models and target operating models.

K3: Principles of estimating the risks and opportunities of digital and technology solutions.

K4: Techniques and approaches involved in creating a business case for new digital and technology solutions. For example journey, product and capability mapping and value chains.

K5: A range of digital technology solution development techniques and tools.

K6: The approaches and techniques used throughout the digital and technology solution lifecycle and their applicability to an organisation’s standards and pre-existing tools.

K14: A range of quantitative and qualitative data gathering methods and how to appraise and select the appropriate method.

K18: Techniques of robust research and evaluation for the justification of digital and technology solutions.

Transferable skills

Reasoning skills; Estimation skills; Research skills; Business Analysis skills; Business case skills; Value Analysis Skills; Risk Analysis; Cost analysis; Acquisition management skills

Study

Study time

Type	Required
Lectures	23 sessions of 1 hour (15%)
Seminars	7 sessions of 1 hour (5%)
Work-based learning	15 sessions of 1 hour (10%)
Online learning (independent)	5 sessions of 1 hour (3%)
Other activity	5 hours (3%)
Private study	35 hours (23%)
Assessment	60 hours (40%)
Total	150 hours

Private study description

35 hours guided self-study including:

- Self-guided study: revision on module contents, solution of additional seminar-type questions, video tutorials, software exercises and supplementary materials.
- Online forum for discussing queries with course peers and tutor.
- Distance learning support using technology enhanced learning.
- Work based observation and reflection
 - Analyzing case studies of components.
 - Teams/forum for discussing queries with course peers and tutor (asynchronous).

Other activity description

- Pre-module reading list given on Moodle to encourage flipped learning approach.
- Preparation for the practical work on worksheets and quizzes
- Online consulting session for providing one to one support to help struggling students.

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A

	Weighting	Study time	Eligible for self-certification
Business Case Report (60%) Post Module Assessment: A report in the form of a business case to implement a strategic information system business change.	60%	36 hours	Yes (extension)
Business Role and Capability Analysis - Individual Coursework Apprentices will investigate a key role in information systems within their company, investigating this role in depth.	40%	24 hours	Yes (extension)

Feedback on assessment

Feedback will be given as appropriate to the assessment type:

- Written summative feedback on coursework
 - Verbal cohort-level feedback on quizzes
 - Video feedback where appropriate
 - Automatic feedback via Moodle for formative online quizzes.
 - Verbal feedback in class
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Availability

Courses

This module is Core for:

- Year 2 of DWMS-H655 Undergraduate Digital and Technology Solutions (Cyber) (Degree Apprenticeship)
- Year 2 of DWMS-H652 Undergraduate Digital and Technology Solutions (Data Analytics) (Degree Apprenticeship)
- Year 2 of DWMS-H653 Undergraduate Digital and Technology Solutions (Network Engineering) (Degree Apprenticeship)
- Year 2 of DWMS-H654 Undergraduate Digital and Technology Solutions (Software Engineering) (Degree Apprenticeship)