

# WM9PQ-15 Strategic Information Systems Management

**24/25**

**Department**

WMG

**Level**

Taught Postgraduate Level

**Module leader**

Mohannad Alajlani

**Credit value**

15

**Module duration**

4 weeks

**Assessment**

100% coursework

**Study location**

University of Warwick main campus, Coventry

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## Description

### Introductory description

The Strategic Information Systems Management module is designed to provide students with advanced understanding of how information systems play a pivotal role in shaping and supporting data-driven decision-making and efficient operations within organizations. This module combines strategic thinking with practical insights, preparing students to lead in a digital and data-centric business environment.

### Module aims

This module equips students with a deep understanding of how information systems can be strategically managed and leveraged to enhance data-driven decision making and digital operations in contemporary organizations. It emphasizes the alignment of IT with business objectives, data-driven decision-making, and effective leadership in the context of digital transformation.

### 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.

#### a) Introduction to Strategic Information Systems Management

- Strategic Significance of Information Systems
- Aligning Information Systems with Business Strategy
- Ethical Considerations in Strategic IS Management
- b) Data-Driven Decision-Making
  - Data Analytics for Decision Support
  - Business Intelligence Tools and Techniques
  - Data Visualization for Strategic Insights
- c) Digital Transformation Leadership
  - Leading Digital Initiatives
  - Change Management in Digital Transformation
  - Innovation and Entrepreneurship in a Digital World
- d) IT Governance and Data Security
  - IT Governance Frameworks (e.g., COBIT, ITIL)
  - Data Governance and Privacy Regulations (e.g., GDPR)
  - Cybersecurity in Data-Driven Operations
- e) Operational Excellence through Information Systems
  - Lean Principles and Process Optimization
  - Agile Operations and Continuous Improvement
  - Supply Chain Optimization in the Digital Age

## Learning outcomes

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

- Develop and implement strategies that align information systems with business goals, emphasizing data-driven decision making, strategic analytics, and ethical data management and security.
- Analyze and align information systems with organizational goals, focusing on data-driven decisions, digital efficiency, strategic analytics, and principles of digital transformation to drive innovation.
- Evaluate IT governance frameworks and data security protocols to ensure the ethical and secure management of data in digital operations.
- Develop strategies to enhance operational efficiency, agility, and innovation through the strategic use of information systems and data analytics.
- Collaboratively develop and present a comprehensive Information Systems Strategic Plan for an organization, demonstrating the ability to strategically align information systems with business goals.

## Indicative reading list

Laudon, K.C. & Laudon, J.P. 2020, Management information systems: managing the digital firm, Global;Sixteenth; edn, Pearson, Harlow, England.

Peppard, J. & Ward, J. 2016, The strategic management of information systems: building a digital

strategy, Fourth edn, Wiley, Hoboken.

Westerman, G., Bonnet, D. & McAfee, A. 2014, Leading digital: turning technology into business transformation, Harvard Business Review Press, Boston, Massachusetts.

Provost, F. & Fawcett, T. 2013, Data science for business: what you need to know about data mining and data-analytic thinking, 1st edn, O'Reilly Media, Sebastopol, CA.

Hess, T. 2022, Managing the digital transformation: a guide to successful organizational change, Springer Gabler, Wiesbaden.

## Interdisciplinary

A mixture of technology/computing topics and business topics

## International

Topics are of high international demand

## Subject specific skills

Strategic Alignment Skills, Data-Driven Decision-Making Skills, Digital Transformation Leadership Skills, IT Governance and Data Security Skills

## Transferable skills

Analytical and Problem-Solving Skills, Communication and Presentation Skills. Teamwork and Collaboration Skills, Leadership and Change Management Skills, IT Governance and Compliance Awareness Skills

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## Study

### Study time

Type	Required
Lectures	20 sessions of 1 hour (13%)
Seminars	10 sessions of 1 hour (7%)
Online learning (independent)	60 sessions of 1 hour (40%)
Assessment	60 hours (40%)
Total	150 hours

### Private study description

No private study requirements defined for this module.

## Costs

No further costs have been identified for this module.

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## Assessment

You must pass all assessment components to pass the module.

### Assessment group A

	Weighting	Study time	Eligible for self-certification
<b>Assessment component</b>			
Group Assessment	30%	18 hours	No
In teams, students will develop a strategic plan for an organisation focusing on how information systems can enhance data-driven decision-making and digital operations.			
Peer Marking Process will be adopted in this assessment.			

#### Reassessment component

Individual Presentation with Group Reflection	Yes (extension)
Students will develop a strategic plan for an organisation focusing on how information systems can enhance data-driven decision-making and digital operations and an individual reflection of group work.	

#### Assessment component

Assignment	70%	42 hours	Yes (extension)
A business-style report with the application of strategic information systems concepts to a real-world scenario particularly in the context of data science and digital operations.			

Reassessment component is the same

## Feedback on assessment

Verbal feedback for the group assessment. Written feedback for the assignment.

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## **Availability**

There is currently no information about the courses for which this module is core or optional.