

WM9PQ-15 Strategic Information Systems Management

26/27

Department

WMG

Level

Taught Postgraduate Level

Module leader

Mohannad Alajlani

Credit value

15

Module duration

4 weeks

Assessment

Multiple

Study location

University of Warwick main campus, Coventry

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.

- Strategic Role of Information Systems in Organisations: Introduction to the strategic importance of information systems in business environments, approaches to aligning information systems with organisational objectives, and ethical and responsible management of information and technology resources.
- Fundamentals of Data-Informed Decision-Making and Business Intelligence: Concepts and practices in data-informed decision-making; Overview of data analytics and business intelligence applications; Interpreting data to support strategic and operational decision-making.
- Leading Digital Transformation and Organisational Change: Principles of digital leadership and change management; Strategies for planning and implementing digital transformation initiatives; Innovation, agility, and digital entrepreneurship in evolving business contexts.
- Governance, Risk and Security in Digital Operations: Overview of IT governance frameworks (e.g., COBIT or ITIL); Data governance, privacy, and regulatory compliance (e.g., GDPR or equivalent); Approaches to cybersecurity and ethical data stewardship in digital environments.
- Enhancing Operational Performance through Information Systems: Role of information systems in improving efficiency, agility, and value creation; Leveraging digital tools for operational excellence across business functions.

Learning outcomes

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

- Critically evaluate strategies to align information systems with business objectives, with a focus on enabling data-informed decision-making and supporting organisational goals.
- Assess and apply data analytics tools and strategic information systems to improve operational efficiency, agility, and innovation within digital business environments.
- Evaluate IT governance models and data security frameworks, applying ethical principles to ensure responsible and secure management of digital information systems and data assets.
- Demonstrate the ability to lead digital transformation initiatives by integrating information systems into organisational strategy and operations.
- Collaboratively design and present a comprehensive Information Systems Strategic Plan, demonstrating the strategic alignment of Information Systems capabilities with organisational needs.

Indicative reading list

[Reading lists can be found in Talis](#)

[Specific reading list for the module](#)

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

Study

Study time

Type	Required
Lectures	20 sessions of 1 hour (13%)
Seminars	10 sessions of 1 hour (7%)
Online learning (independent)	30 sessions of 1 hour (20%)
Private study	30 hours (20%)
Assessment	60 hours (40%)
Total	150 hours

Private study description

Private study will include preparing for lectures and seminars, reviewing lecture notes, and engaging with required readings and multimedia resources.

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A1

	Weighting	Study time	Eligible for self-certification
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. This assessment includes a Peer Review Activity.			
Peer Marking Process will be adopted in this assessment.			
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.			

Assessment group R1

	Weighting	Study time	Eligible for self-certification
Individual Presentation with Group Reflection	30%		No
Students will develop a strategic plan for an organisation focusing on how information systems can enhance data-driven decision-making and digital operations. This presentation will be recorded and submitted.			
Assignment	70%	42 hours	No

Feedback on assessment

Verbal feedback for the group assessment with a written summary. Written feedback for the assignment.

Availability

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