

IB9K1-15 MIS: Foundations and Critical Perspectives

26/27

Department

Warwick Business School

Level

Taught Postgraduate Level

Module leader

Mo Moeini

Credit value

15

Module duration

10 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

The module adopts a broad view of Information Systems (IS) defined as complex integrated constellations of hardware, software, and data that represent, facilitate, and automate different business processes within and across different functions and for various internal and external actors. Managing IS (MIS) concerns all stages of the lifecycles of a system or its sub-systems (e.g., prospecting, initiating and architecting, selecting, building, implementing, using and operating, leveraging for business value, maintaining and updating, and terminating). The module offers theoretical frameworks to analyse these issues and uses several practical examples and hands-on activities.

[Module web page](#)

Module aims

This module offers students a solid conceptual and theoretical foundation at the forefront of research on complex and state-of-the-art integrated information systems. By demonstrating how the concepts and theories covered are linked to practice, the module also provides relevant jargon and frameworks useful for managing contemporary information systems.

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.

The module begins with conceptualizing information systems (IS) as complex artifacts composed of various digital technologies in organizations used by people in support of strategies and processes within social contexts with differing performance effects and strategic implications. IS and management of it are then linked to the notion of enterprise architecture (EA).

Next, the module carries out a deep dive on different layers of EA by presenting their foundations and discussing some critical issues regarding each. By focusing on the IT infrastructures layer, core system components (e.g., databases, algorithms, networks, end points, and user interfaces) are overviewed. Looking at the application layer, different system types are distinguished (e.g., ERPs vs CRMs vs application-specific digital artifacts such as an AI tool). Within the business layer, the importance of business processes is highlighted, and IS is linked to the notions of business process representation, integration, augmentation and automation, also business process modelling/mining and added-value diagnosis. Focusing on the data layer, the link between organizational representation/integration and enterprise data governance are discussed.

Second, the module digs deep on the management of IS and links with the governance of EA are discussed. Different critical issues over a system lifecycle (from prospecting to initiation to acquisition to implementation to termination of legacy systems) are highlighted. A special attention is paid to the critical issues around managing system design and selection (requirements analysis, multi-criteria decision making based on task technology fit), managing system development and implementation (with a brief overview of incremental and iterative approaches), and managing system use (with a theoretical focus on phenomena such as adoption, post-adoption, effective use, deep feature use, and innovative use, and user resistance).

In this module, the student experience of information systems is underpinned by engagement with several hands-on activities including modelling real-world IT-enabled processes, using real-world information systems (e.g., realistic business simulations using SAP and ERPsim), and analyzing real-world enterprise architectures.

Learning outcomes

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

- Demonstrate a comprehensive understanding of key concepts (e.g., complex systems), theories (e.g., organizational representation and integration), frameworks (e.g., enterprise architecture) regarding the design, implementing, management and governance of information systems and their effects in contemporary organizations.
- Exhibit a deep understanding of current critical issues over the lifecycle of information systems (e.g., managing legacy systems, system complexity, effective use, and user resistance)
- Demonstrate an advanced understanding of key foundational, trending, and emerging technologies (e.g., databases, ERPs, microservices) and related techniques/methodologies

(e.g., process modelling, requirement analysis) at a level required for being confident to partake in managing and leading information systems

- Critically analyse advantages and disadvantages of available technology alternatives under the light of identified business requirements to identify most suitable solutions
- Evaluate the intertwined social and technical issues faced by implementing information systems

Indicative reading list

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

Subject specific skills

Conduct original analysis of a real business situation to define and analyse problems, elicit requirements, formulate ideas and identify/articulate satisfying solutions (e.g., enterprise architecture updates), and develop and execute plans to critically evaluate these

Transferable skills

Deliver written communications tailored to the audience by making well-evidenced and logically coherent arguments that make a reasonable use of relevant jargon

Demonstrate professional relationships with others (including collaborating with, managing, leading, and exchanging feedback with them) in the context of information systems and digital innovation considering professional/disciplinary norms

Study

Study time

Type	Required
Lectures	10 sessions of 1 hour (7%)
Other activity	20 hours (13%)
Private study	48 hours (32%)
Assessment	72 hours (48%)
Total	150 hours

Private study description

Private study to include preparation for lectures and workshops

Other activity description

10 x 2 hr workshops

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 A4

	Weighting	Study time	Eligible for self-certification
Assessment component			
Individual Assignment	70%	50 hours	Yes (extension)
Reassessment component is the same			
Assessment component			
Group project	30%	22 hours	No
Reassessment component			
Individual assignment			Yes (extension)

Feedback on assessment

Verbal and written

Availability

Courses

This module is Core for:

- Year 1 of TIBS-G5N4 Postgraduate Taught Management of Information Systems and Digital Innovation