# Management Information Systems

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***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

Digitalization is drastically enhancing the ability to capture and analyse information and automatize processes. This in turn is driving innovation. New technologies such as big data, artificial intelligence, blockchain, cloud computing and Internet of Things are changing the competitive landscape of most industries. To thrive, incumbents and new entrants alike must adapt both decision and operating processes. From a general management perspective, the course builds skills and competences required to understand digitalization and lead its adoption in an organization.

The course is divided into two main knowledge areas (Modules). The first focuses on Management Information Systems (MIS) fundamentals and organizational aspects. The second covers infrastructure of ISs, big data and artificial intelligence.

At the end of the course, students will be able to:

* Identify and interpret multidisciplinary theoretical and conceptual foundations associated with digitalization and new technologies (including, big data, artificial intelligence, blockchain, cloud computing and Internet of Things) to understand the challenges faced by managers both in a local and global context, including ethical and sustainable considerations (Knowledge);
* Develop theoretical and conceptual knowledge of how leveraging on MISs drives digital business transformation in global and multicultural environments (Knowledge);
* Apply proven theoretical and conceptual knowledge on how to use management systems to leverage, implement and facilitate innovation and use of technologies as a competitive enabler in a fast-changing global and multicultural landscape (Practical skill);
* Develop critical decision making and sustainable problem-solving to analyse, evaluate and implement MIS and digital technologies in the business world (Transferable skills).

***COURSE CONTENT***

Module One – Fundamentals & Impact on Organizations

1. Managing the Digital World;
2. Gaining competitive advantage through ISs;
3. Enabling Business-to-consumer Electronic Commerce;
4. Strengthening Business-to-business Relationships.

Module Two – Leveraging on MIS to Drive Digital Business Transformation

1. Managing the IS Infrastructure and Services;
2. Enhancing Business Intelligence using Big Data, Analytics and Artificial Intelligence;
3. Enhancing Business Processes Using Enterprise ISs;
4. Securing Information Systems.

***READING LIST[[1]](#footnote-1)***

Required readings

Valacich, Joseph, S. and Christoph Schneider. *Information Systems Today: Managing in the Digital World*, Global Edition. (9th edition). Pearson International Content, 2022. [*Acquista da VP*](https://librerie.unicatt.it/scheda-libro/valacich-j/information-systems-today-managing-in-the-digital-world-global-edition-9th-edition-9781292438115-713938.html)

https://www.pearson.com/en-gb/subject-catalog/p/information-systems-today-managing-in-the-digital-world-global-edition/P200000007253/9781292438153?utm\_source=copystudentlink&utm\_medium=referral&utm\_campaign=XXLEGP0423PCOM

Recommended journals

Behavior and Information Technology; Business and Information Systems Engineering; Business Information Systems Review; Communications of the ACM Ethics and Information Technology; European Journal of Information Systems; Information & Management; Information and Organization; Information Systems Management; Information Systems Research; Information Technology and People; International Journal of Business Information Systems; International Journal of Information Management; Journal of Global Information Management; Management Information Systems Quarterly; Scandinavian Journal of Information Systems.

***TEACHING METHOD***

In order to encourage active learning, a variety of teaching methods will be used throughout the course. This includes frontal teaching, class discussions, problem solving exercises and team work assignments (case study based). Selected guest speakers will also be invited to share their professional experiences.

Active participation is highly encouraged at all times.

***ASSESSMENT METHOD AND CRITERIA***

Multiple assessment route:

Final evaluation will be based on a teamwork project (40%) and on a written test (60%). Both are mandatory:

Teamwork project: The teamwork projects are aimed at practising how to analyse, evaluate and implement MIS and digital technologies in a real-world business context; projects are done partially in-class and partially out-of-class and include coaching from the lecturers.

Written test: Includes open-ended and multiple-choice questions.

Single assessment route :

A single assessment route consists of a written test lasting one hour. It is composed of open and multiple-choice questions on the whole program of the course.

Each grade received in the written tests and in the teamwork project must be equal or greater than 18/30. Please refer to Blackboard for additional details.

Assessment criteria: the student's preparation is evaluated according to grading the following scales.

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| --- | --- | --- | --- |
| **Grade** | **Commmon description** | **Specific for knowledge-type ILOs (open questions)** | **Specific for skill-type ILOs (case study; teamwork projects)**  |
| **30 - 30 cum laude** | Excellent quality showing a full achievement of learning outcomes beyond normal expectations. | Excellent breadth and depth of knowledge of subject matterFull understanding of questionsOriginal and very well formulated arguments, strongly connecting different knowledge objects | Full understanding of multi-cultural business contextsStrong and fully rigourous use of evidenceExcellent efficacy of applied analysis, with many original and critical arguments |
| **27-29** | Very good quality showing that learning outcomes are surpassed | Good breadth and depth of knowledge of subject matterVery good understanding of questionsClearly developed arguments, with some original arguments and connections between knowledge objects | Very good understanding of multi-cultural business contextsVery good use of evidenceVery good efficacy of applied analysis, with some original and critical arguments |
| **24-26** | Good quality showing that learning outcomes are achieved and to some extent surpassed | Adequate breadth of knowledge of subject matterQuite complete understanding of questionsClearly developed arguments, with few original arguments | Quite complete understanding of multi-cultural business contextsAdequate use of evidenceAdequate efficacy of applied analysisOriginality and critical thinking are present, but limited |
| **21-23** | Basic quality with clear evidence that learning outcomes are achieved | Basic breadth of knowledge of subject matterBasic understanding of questions with some inadequaciesDeveloped arguments, without original arguments | Basic understanding of multi-cultural business contextsBasic use of evidence with some inadequaciesBasic applied analysis with some inadequacies and without original and critical argumentations |
| **18-20** | Sufficient quality showing that learning outcomes are being achieved | Sufficient knowledge of subject matter, even though breadth and depth of knowledge are lackingPartial understanding of questionsArgumentation is present, but limited | Partial understanding of multi-cultural business contextsPartial use of evidenceApplied analysis is framed, but limitedArgumentation is present, but limited |
| **0-17**  | Unsatisfactory quality showing that learning outcomes are not achieved | Absent or poor knowledge of subject matterAbsent understanding of questionsArgumentation is absent | Absent or poor understanding of multi-cultural business contextsAbsent or wrong use of evidenceAbsent or wrong applied analysisArgumentation is absent |

***NOTES AND PREREQUISITES***

N. ECTS – 8

Enrollment requirements – No prerequisites or preparatory courses required.

Language of instruction – English.

Time – I term; 7.5 hours per lecture week (7.5 x 8 weeks = 60 hours in total).

Attendance – Attendance is is strongly recommended.

Associated courses – Customer-based marketing; Brand Management; Performance measurement; Project management; Supply chain management

International dimension – International teaching materials are used throughout the course.

Business connection - The course makes extensive use of contemporary case studies and examples. Selected guest speakers will also be invited to share their professional experiences.

Professional context – Technology is all around us and is impacting business and society in multiple ways. The course provides frameworks, methodologies, and real-life applications on how to leverage on MIS from a general management perspective.

Further information – Additional information regarding the course schedule and delivery, learning assessment, expectation and policies, general announcements, and additional course materials will be posted on Blackboard.

1. I testi indicati nella bibliografia sono acquistabili presso le librerie di Ateneo; è possibile acquistarli anche presso altri rivenditori. [↑](#footnote-ref-1)