# 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 syllabus is divided into two main knowledge areas (Modules). The first focuses on Management Information Systems (MIS) fundamentals and technologies driving digital transformation. The second covers how companies can leverage on MIS across business areas.

At the end of the course, students will have developed skills allowing them to:

* Understand the main elements and issues related to digitalization and MIS, both from a theoretical and practical perspective;
* Become familiar with how digitalization and new technologies (including, big data, artificial intelligence, blockchain, cloud computing and Internet of Things) are impacting businesses
* Apply knowledge and understanding of MIS, demonstrating problem solving skills, including how to deal with innovation from a managerial point of view;
* Make judgments and take managerial decisions handling complexity and knowing how to analyse, evaluate and implement MIS and digital technologies in the business world;
* Learn how to work towards autonomous recommendations and conclusions, both independently and in teams;
* Communicate effectively with specialist and non-specialist audiences, using accurate terminology and thought structure.

***COURSE CONTENT***

 Module One – Fundamentals & Technologies Driving Digital Transformation

1. Introduction to MIS;
2. Technological Building Blocks – From Data to IT Architecture;
3. New & Emerging Technologies – Big Data, Artificial Intelligence, Blockchain, Cloud Computing and Internet of Things;
4. Cyber Security, Privacy & Ethical Considerations.

 Module Two – Leveraging on MIS to Drive Digital Business Transformation

1. Strategy & Data Driven Innovation;
2. Using Decision Support Systems and Social Media for Marketing & CRM;
3. How Industry 4.0 Impacts Operations & Supply Chain Management;
4. Leveraging on Organization & Project Management to Drive Change.

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

Non-attending students are asked to read in full Daniel J. Power and Ciara Heavin, Decision Support, Analytics, and Business Intelligence (3rd edition, Business Expert Press Information Systems Collection) as well as selected chapters of Kenneth C. Laudon and Jane P. Laudon, Management Information Systems: Managing the Digital Firm (Global Edition, Perarson publishers). Both books are available in hard copy and Ebook. Please see Blackboard for further details.

Attending students are asked to focus on the lecturer’s notes and reading material to be made available on Blackboard. Textbooks are voulutnary for attending students.

***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 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***

Non-attending students. Assessment based entirely on a written exam. The paper consists of open questions (40% of written exam mark) and a case study (remaining 60%). The paper lasts one hour and 30 minutes.

Attending students. Assessment based on:

Marks received on team assignments conducted during the course (40% of the total);

Written exam (remaining 60%)

The written exam for attending students consists of two papers. The first paper (40% of written exam mark) is a half term assessment covering the first Module and is primarely based on open questions. The second paper (remaining 60%) is based on selected open questions on the second Module and a case study spanning the entire course material. The first paper lasts 30 minutes while the second lasts one hour.

Assessment (attending and not attending students) is based on the following criteria:

Knowledge and understanding of the material covered during the course;

Analytical skills and problem solving;

Ability to apply frameworks and concepts to practical situations and business cases;

Ability to connect the dots with competences and knowledge learned during other courses and / or internships;

Ability to communicate concisely and effectively;

Awareness of the business environment and key micro and marco economic trends.

Please refer to Blackboard for additional details and mock questions.

***NOTES AND PREREQUISITES***

Attendance is strongly recommended.

Detailed syllabus, timetable and coursework material to be made available on

Blackboard.

Students are encouraged to contact me by email to arrange a meeting in person (Via Necchi office) or a video call (in case of lockdown).

No prerequisites or preparatory courses required.

In case of continuing Covid-19 lockdown, the course and the exam will be adminitered remotely via videolink or as advised by the Faculty. Details to be communicated 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)