

# Information security management (EM054M6C)

Program	PGE
Course set (UE) / Credits (ECTS) / Track / Specialization	<b>Module :Information security management : 5 ECTS.</b> <ul style="list-style-type: none"><li>• MGA</li></ul>
Discipline	Management Information Systems
Year	2020
Semester	B
Open for visitors	no
Available spots	40

## Coordinator

Laura GEORG SCHAFFNER

## Lecturers

Instructor	Population	Email
Laura GEORG SCHAFFNER	Population	laura.g.schaffner@em-strasbourg.eu

## Course format

Working language :	English
Volume of contact hours :	27 h
Workload to be expected by the student :	108 h

## Course track

Track : Attendance

### Attendance track :

Attendance at lectures/tutorials and intermediate/final assessments is mandatory. As in-class work constitutes an essential element of evaluation, any unjustified absence will be penalized (*see Study and Examination Regulations*) and factored into the final grade (*see Assessment*).

### Autonomous track :

Attendance at intermediate/final assessments is mandatory, but students have the option of attending lectures/tutorials.

Attendance at lectures/tutorials and intermediate/final assessments is mandatory for all degrees making up the Master's Program and all degrees involving co-op (*apprentissage*). Attendance track must therefore be selected.

## Contribution of the course to the educational objectives of the program

**How the course contributes to the program :**

**LEARNING GOAL 1 : Students will master state-of-the-art knowledge and tools in management fields in general, as well as in areas specific to the specialized field of management.**

Students will identify a business organization's operational and managerial challenges in a complex and evolving environment.

Students will understand state-of-the-art management concepts and tools and use them appropriately.

Students will implement appropriate methodologies to develop appropriate solutions for business issues.

**LEARNING GOAL 2 : Students will develop advanced-level managerial skills.**

Students will work collaboratively in a team.

Students will participate in a decision-making process in a critical way.

Students will communicate ideas effectively, both orally and in writing, in a business context.

**LEARNING GOAL 3 : Students will demonstrate their understanding of practices reflecting ethical, diversity and sustainable development values in business organizations.**

Students will identify and analyze issues relating to diversity, ethics and sustainable development in their business context.

**LEARNING GOAL 4: Students will study and work effectively in a multicultural and international environment.**

Students will analyze business organizations and problems in a multicultural and international environment

## Description

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Securing the availability, confidentiality and integrity of information became key success factors for enterprises to create, preserve, and extend their competitiveness in the information age. Information Security is an integral part of Information Systems Management going beyond IS boundaries and touching issues of HR, Marketing or Risk Management. This course provides a comprehensive overview of relevant topics in the area starting with developing Security Management & Governance strategies, applying international Best-Practice Standards, designing Security Strategies and Architectures, explaining the logic of Security Infrastructure and learning about Security Processes. The course combines theories with practical examples, using a case study to deepen students understanding of the topic. The course will also contain a final chapter on discussing Security Ethics encouraging critical thinking while deploying security tools.

## Educational organisation

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In class

### Lectures

In groups

### Projects

### Oral presentations

Interaction

### Discussions / debates

## Learning outcomes

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**Upon completion of this course, students should be able to :**

- **Memorize** the main theories/frameworks from InfoSec disciplines on Security Management and Governance, incl. HR Security, operational risk management etc.
- **Apply** the principles for design of security architectures
- **Analyze** Information Security Infrastructure elements to perform efficient and effective choices on their deployment.
- **Generate** unanswered questions that may provide fruitful venues for research
- **Generate** a qualitative research case study.

## Outline

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Session 1: Introduction :The role of Information Security in Companies  
Session 2: Cyber Risk Management  
Session 3: Infonomics: The Value at Risk  
Session 4: CISO in Practice  
Session 5: Security Governance & Metrics  
Session 6: Global Security Standards  
Session 7: Security Strategies & Creating Security Awareness  
Session 8: Privacy Design  
Session 9: Outlook & Ethics

## Prerequisites

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**Key concepts to understand :**

**Knowledge of :**

None.

## Teaching material

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### Documents in all formats

- Syllabus
- Newspaper articles
- Case studies

### Software

- Office Pack (Word, Excel, PowerPoint, Access)

## Recommended reading

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**Major works :**

Course Book:

Management of Information Security, 5th Edition

Michael E. Whitman Michael J. Coles College of Business, Kennesaw State University/ Herbert J. Mattord Michael J. Coles College of Business, Kennesaw State University

ISBN-10: 130550125X | ISBN-13: 9781305501256

592 Pages

**Further reading :**

**Research works by EM Strasbourg :**

Laura Georg Schaffner, Information security governance: pending legal responsibilities of non-executive boards, September 2016, Journal of Management and Governance 21(4), DOI: 10.1007/s10997-016-9358-0

## Assessment

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**Intermediate evaluation / continuous assessment 1 : session n°2,3,4,5,6,7**

written (10 min) / individual / English / weighting : 50%

additional information : Each session starts with a short quiz in moodle revisiting the content of the previous session as well as posing questions on the prepared material of the class of the day. Unexcused absences result in a reduction of 1 pt of the final grade. Excused absences can be compensated through bonus questions from quizzes of other sessions.

**This evaluation serves to measure LO1.1, LO1.2, LO1.3, LO3.1**

**Intermediate evaluation / continuous assessment 2 : session n°2,3,4,5,6,7**

written + oral (20 min) / in group / English / weighting : 50%

additional information : Groups of minimum of 2 students present their results of an ongoing course project at every session. The presentation must be made available to the class 2 days before the session.

**This evaluation serves to measure LO1.1, LO1.2, LO1.3, LO2.1, LO2.3, LO4.2**

## Grounds for expulsion from classes

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Behaviors such as

**arriving late, leaving early, or exiting the classroom at inopportune moments during class**

**ostentatiously eating or drinking in class**

**using smartphones or laptops for non-class-related purposes**

**reading texts unrelated to the course**

**discussing topics unrelated to the course**

**disrespecting the lecturer**

may lead to expulsion from the class/course.