

# II.3512 – Governance and Organization of Information Systems

## General information

Governance and organization of information systems Module ID: II.3512 Module leader: Nouredine TAMANI ECTS: 5 Average amount of work per student: from 100 to 150 hours, including 42 hours supervised Teamwork: no Keywords: IT strategy, Data governance, DevOps, Block Chain, Workflow, TOGAF
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## Presentation

This new digital era requires a company to be at the forefront of new technologies. In this module, students will enrich their technical and organizational knowledge through certain tools and approaches that make it possible to implement an agile, sustainable, sustainable and low-cost IT strategy in a company, and more particularly within an IT department (Information Systems Department).

## Educational objectives

- Develop a governance strategy, implement the strategy, monitor the implementation of the strategy)
- Integrate the various players in the value chain, processes, data, and IS architectures
- Carry out technological, legal and strategic monitoring

### *Prerequisite*

Notions in IS architecture and agile approaches.

### *Content/Program*

#### Concepts

- Operational IT Strategy:
  - Data governance
  - Cloud Computing
  - Workflow
  - ERP/SAP
  - Virtualization
  - B2B, C2C
  - Dematerialization (EDI, EAI, EDM, Data ARCHIVING)
  - DevOps
  - Software factories
  - BlockChain
  - IoT
- Standards and standards in companies
  - TOGAF, ITIL, CMMI, etc.

#### Tools used

- Amazon AWS Cloud Computing
- SAP IoT

## Pedagogical methods

### *Learning methods*

The module alternates between theory (about 2/3) and practice (about 1/3). Classes can be taught in whole classes or in small groups.

This module includes practical work sessions. Theoretical concepts are often illustrated by real cases.

### *Evaluation methods*

The evaluation of this module is based on

- An individual assessment through a written exam in the form of multiple-choice questionnaire and open questions
- Collective assessment through projects

### *Language of work*

Module delivered entirely in English.

## Bibliography, Webography, Other sources

- TOGAF® <http://www.opengroup.org/subjectareas/enterprise/togaf>
- CMMI: [http://www.labri.fr/perso/xblanc/data/CP/CMMI\\_SQLI\\_LABRI\\_nov2012.pdf](http://www.labri.fr/perso/xblanc/data/CP/CMMI_SQLI_LABRI_nov2012.pdf)
- ITIL: <https://www.axelos.com/best-practice-solutions/itil>
- ITIL: <https://www.youtube.com/watch?v=gpfqJW8fr7g>
- Devops MOOC: <https://www.edx.org/course/introduction-devops-transforming-linuxfoundationx-lfs161x>