

IS management project (EM165M41)

Program	PGE
Course set (UE) / Credits (ECTS) / Track / Specialization	Module :IS management project : 5 ECTS. <ul style="list-style-type: none">• Visitants
Discipline	Management Information Systems
Year	2020
Semester	A
Open for visitors	no
Available spots	25

Coordinator

Sven Volker REHM

Lecturers

Instructor	Population	Email
Sven Volker REHM	Population	sven.rehm@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.

Description

Information Systems (IS) are at the core of each enterprise. Any company that strives to be innovative, to increase competitiveness, or to survive market disruptions, must adapt and develop its information management capability. All management tasks rely on information, and the appropriate information and communication technologies (ICT) to manage teams and cooperations with business partners. The course IS Project Management (ISPM) offers participants a comprehensive introduction to leveraging IS in business and management. Participants are provided with the essential knowledge and skills that prepare them for analyzing and designing IS and managing IS projects.

The course ISPM provides a broad overview of the role of IS for management, and of current changes, challenges and opportunities. The course takes on a management, not a purely technical, perspective. It features an introductory overview, presenting the basic function and strategic importance of business processes, of information and of ICT in organizations. It also acquaints participants with current aspects of designing and managing IS in a world of big data, cloud services and data science that help coping with challenges for management and for advancing emergent businesses. Principal aspects and major trends of managing information technology (IT) within today's business environment are discussed.

First, an introductory overview of IS and strategic aspects will be given. Second, an introduction to Systems Analysis and Design provides exercises on

business process and data modeling. Third, the changing nature of information, communication and systems as well as the changing nature of work and the “digital” workplace are discussed. Third, softer aspects regarding group work and knowledge work are debated.

The lecture features exercises on basic IS modeling issues in order to advance students in mastering engineering-related challenges. Topical case studies are discussed in class on major subjects. The topic of “Digital Transformation” is approached through a Problem-Oriented Learning (POL) scenario building workshop as group assignment.

Teaching Methods:

The course integrates several teaching methods. Foundational topics such as concepts, principles, frameworks or theories are presented through lectures. Basic factual knowledge and information are in addition acquired through self-study. Interactive analysis of case studies illustrates practical relevance of selected issues. Class discussions and active learning sessions exemplify discursive decision-making processes, integrating competing or diverging views on socio-technical challenges. Exercises deliver basic skills regarding IS analysis and design as well as project management. If the number of participants permits, the topic of “Digital Transformation” is approached through a Problem-Oriented Learning (POL) scenario building workshop as group assignment. The course is delivered as blended learning course (featuring presence as well as online synchronous and asynchronous sessions; and using as required online tests, wikis, assignments, discussion threads, blogs).

Educational organisation

In class

Lectures

Tutorials

Tutoring

In groups

Exercises

Case studies/texts

Oral presentations

Interaction

Discussions / debates

Learning outcomes

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

- **Outline** data management strategies and propose basic data structures for specified business situations.
- **Analyze** analyze challenges for ICT in networked enterprises.
- **Differentiate** IS integration problems from business and management perspectives.
- **Construct** and modify an IS strategy for a networked enterprise, and for knowledge work and virtual teams.
- **Assess** the importance and strategic implications of ICT in specified business situations.

Outline

1. IS for the Networked Business Environment, Strategy & Organization of Value Creation
2. Introduction to Systems Analysis and Design
 - a. Databases and Data Modeling
 - b. Business Process Modeling
3. The Changing Nature of Information, Communication and Systems
 - a. IS, Systems, Software and Services for Organizational Change and New Forms of Organizations
 - b. Business Analytics
- c. The Agile Culture and Agile Software Development
4. The Digital Workplace and the Changing Nature of Work: Bridging the Workplace of People, Data and Things
5. Work Group Processes and Dynamics
6. IS for Cooperative Work, Knowledge Management and Innovation

Prerequisites

Key concepts to understand :

Knowledge of :

- Basic functions of business (Introduction to business administration)

Teaching material

Documents in all formats

- Syllabus
- Case studies

Software

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

Recommended reading

Major works :

Laudon, K. C., & Laudon, J. P. (2018). Management Information Systems: Managing the Digital Firm (15th/Global Ed.), Pearson. (Primary Reference)

Further articles will be defined in class.

Further reading :

Briken, K., Chillias, S., Krzywdzinski, M., & Marks, A. (Eds.) 2017. The new digital workplace: How new technologies revolutionise work. London: Palgrave.
Jabri, M. 2012. Managing organizational change: Process, social construction and dialogue. Basingstoke: Palgrave Macmillan.
Narayan, S. 2015. Agile IT organization design: For digital transformation and continuous delivery. New York: Addison-Wesley.
Newell, S. 2009. Managing knowledge work and innovation (2nd ed.). New York: Palgrave Macmillan.
Pixton, P., Gibson, P., & Nickolaissen, N. 2014. The Agile culture: Leading through trust and ownership. Upper Saddle River, NJ: Addison-Wesley.
Valacich, J. S., & George, J. F. 2017. Modern systems analysis and design (8th ed.). Harlow: Pearson Education Limited.
Xenikou, A., & Furnham, A. 2013. Group Dynamics and Organizational Culture: Effective Work Groups and Organizations. Basingstoke: Palgrave Macmillan.

Research works by EM Strasbourg :

Faber, A.; Riemhofer, M; Rehm, S.-V.; Bondel, G.; Matthes, F. (2019). A Systematic Mapping Study on Business Ecosystem Types. Proceedings of the 25th Americas Conference on Information Systems (AMCIS 2019), Minitrack: Business Models for the Digital Economy. Cancun, Mexico, 15-17 August 2019. https://aisel.aisnet.org/amcis2019/adv_info_systems_research/adv_info_systems_research/2/

Assessment

Intermediate evaluation / continuous assessment 1 :

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

additional information : Assignments for preparation of Reflection Notes (presentations) (50% of grade) will be given out as group assignment.

Those will either involve reflections on a self-selected topic or case study, on core themes of the lecture, or preparing modeling exercises (methods will be introduced in class). Reflection Notes/Presentations will be graded according to a predefined evaluation scheme. It will provide feedback on topic solidity, form, content, and general impression, in order to provide solid feedback to participants.

This evaluation serves to measure L01.1, L01.2, L01.3, L02.1, L02.3

Final assessment : last session

written (60 min) / individual / English / weighting : 50%

additional information : There will be one Written Exam of 60 minutes (50% of grade) at the end of the course.

This evaluation serves to measure L01.1, L01.2, L01.3

Grounds for expulsion from classes

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.