

IS management project (EM165M41)

Program	PGE
Module / ECTS / Path / Specialisation	Module :IS management project : 5 ECTS. <ul style="list-style-type: none">• Visitants
Discipline	Management
Year	2019
Semester	A
Open for visitors	yes (5 ECTS)
Available places	45

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 lecture / tutorial classes and intermediate / final exams is mandatory. As evaluation of in class work constitutes an essential element of grading, any absence will be penalized and is taken into account for grading purposes (see academic rules and regulations).

"Autonomous" track :

Attendance at intermediate / final exams is mandatory, but students are free to attend lecture / tutorial classes.

For all Master programs and all other programs realized in the form of dual internships (apprentissage), attendance at lecture / tutorial classes and intermediate / final exams is entirely mandatory. Therefore, only the "Attendance" track can be selected.

Contribution of the course to the educational objectives of the programme

How the course contributes to the programme :

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. Depending on schedule, guest speakers illustrate issues raised in the course from a professional perspective.

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 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 class is supported by Blended Learning means (online tests, wiki, assignments, discussion threads, blog).

Educational organisation

In class

Lectures

Tutoring

In groups

Exercises

Case studies/texts

Interaction

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., & Nickolaisen, 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 / individual / English / weighting : 33%

additional information : Assignments for preparation of Reflection Notes (presentations) (33% of grade) will be given out as individual or group assignment. Those will either involve reflections on a case study, on core terms/issues 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. If requested by class, Online Self-Tests and Class Pollings are provided to validate your own performance and knowledge (without grading).

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

Final assessment : last session

written (60 min) / individual / English / weighting : 67%

additional information : There will be one Written Exam of 60 minutes (ca. 67% of grade) at the end of the course.

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

Grounds for expulsion from classes

Such behaviors as...

arriving late, leaving early or unannounced leaving of the classroom during class time

disruptive eating or drinking in class

using smartphones and laptops for non class-related purposes

reading non class-related documents

chatting on non class-related issues

showing disrespect towards lecturers

... may lead to expulsion from classes.