

Course Content

Management of Technology

■ IPM

International Project Mgt. 1 & 2

Description: IPM1: Recent studies suggest that up to 35% of company activity takes place in project mode. The figure is higher for innovation-centred organisations and, even more so, in the IS environment. This course will start by addressing some of the difficulties organisations have in implementing PM. Then it will cover the four phases of the classic PM cycle (analysis, framing, implementation, learning). All students will complete a PM competence self-assessment based on the IPMA (International Project Management Association) baseline and work in teams on projects. Special focus will be given to dashboards for piloting projects in the form of a live case. Evaluation will be through daily quizzes, team work activities and a final exam. Five sessions in IPM2 will be devoted to exploring different PM themes linked with those critical subjects. Subjects may include agile methods, stakeholder management, portfolio management, CMMI, PM leadership. A real project may be undertaken by the students.

Learning Outcomes: When you have completed this course, you should be able to:

- Formulate a project vision statement.
- Identify project risks and opportunities.
- Submit a project proposal.
- Construct a work breakdown structure.
- Devise a project Dashboard.
- Pilot the project.
- Carry out a post project review.

When you have completed both modules, you will be able to carry out studies in depth and discuss critical PM subjects.

■ STRAT

Strategic MoT

Description:

Analysis of the organizational environment. Organisational structure & “design”. Analysis of a company’s resources and skills. Planned & emerging strategies Decision-making theories. Do or make do? Alone or in cooperation? Internationalisation Corporate social responsibility. Innovation Management. Change Management.

- Develop acquisition strategy – picking the right social media and advertising support.
- Analyse website structure and find SEO problems.
- Evaluate SEO problems.
- Solve SEO problems.
- Choose appropriate digital plug-in and tools.
- Set up an acquisition strategy for a business unit.
- Develop optimization strategies in order to drive traffic towards the company’s website.

Learning Outcomes:

- To understand the importance of making strategic choices and decisions that shape the future of the business.
- To make students proficient in the analytical tools and techniques used by strategists.
- To assess and choose the strategies for different organisations. To integrate the different organisational components.
- To acquire a structured approach to organisational decision-making.
- To ensure that the various functional decisions follow from implementation of the chosen strategies.
- To be sure that functional decisions facilitate rather than obstruct strategic design and decisions.
- To pay great attention to the pressures and influences on organisation’s business and take into account the advice of stakeholders.

■ Fin & Accounting

Finance & Accounting.

Description:

On a daily-basis, you can have to deal with financial information even though you are not an accountant or a banker. For instance, investors, managers or entrepreneurs have to understand financial statements.

Thus this class aims at developing both financial skills and methodology to any corporate manager

Learning Outcomes:

Once you have completed this module, you will be able to:

- Understand the most important financial statements: the balance sheet and the income statement. How they are prepared and how they are interrelated ?
- Understand the most important financial statements: the balance sheet and the income statement. How they are prepared and how they are interrelated.
- Measure cash flows and understand the relationship between cash, profit and cash flows
- Formulate a diagnosis taking into account profitability and risk

Management

■ OB1

Organisational Behaviour: Managing Diversity & Multi-cultural teams

Description:

- Managing diversity.
- Living in a multi-cultural environment: notions of time.
- Space & Environment
- Hofstede's dimensions of culture.
- "Snapshots" of cultures.

■ NEG

International Negotiation

Description:

With globalization, there are almost no borders to conquer new markets for business development. In this approach, international negotiation is of paramount importance to succeed. In such deals, several issues may arise: culture, dispute resolution, different laws, different types of government, different ideology, etc.

Learning outcomes:

By the end of this course, students should be able to:

- Conduct a negotiation in a highly intercultural environment where the lack of skills in international negotiation could be a handicap.
- Know how to prepare a negotiation.
- Know the techniques of Negotiation.
- Know the strategies and tactics.
- Understand the stakes.

- Know how to use verbal and non-verbal communication.
- Negotiate international technological projects.
- How to deal with asymmetry of power.
- Know how relationships and trust can be built.
- Be creative.
- Identify your BATNA.

■ GEO

Geopolitics

Description:

Geopolitics has, in recent times, known a renewed interest. With the end of the Cold War the triumph of democracy and the free market economy the world seemed to be rid of crisis-generating factors. This, however, is not the case as other types of conflicts have surfaced since then. These conflicts are internal with the emergence of rebel groups vindicating more democracy or simply independence. There are also other types of conflicts involving terrorist groups. The lack of security created by these new types of conflicts has jeopardized business activities. In a context where globalization accelerates, it is helpful to understand the international environment in order to succeed regardless of the area in which one operates. This is especially true in the area of trade, entrepreneurship, technology development where there are connections with political, social and security issues. Thus, knowing the geopolitical environment and the processes of negotiation and mediation to solve conflicts is an asset to be able to analyze the international context in order to develop or establish one's business abroad. Indeed, geopolitics is for companies what the weather is for aircraft. It is safer to consult it before taking off.

Learning Outcomes:

At the end of this course, students should be able to:

- Analyze the causes of conflict.
- Identify areas of conflict.
- Know the aggravating factors.
- Analyze the Political economy of War: How natural resources fuel wars.
- Know the strategies of Conflict management: Negotiation and Mediation.
- To work in an unstable environment.
- Know the impact of technology on the geopolitical competition between states.

■ DIG

Digital Marketing

Description:

- Understanding online strategy.
- Optimizing your web site.
- Targeting your advertising to the right audience.

Part 1: Introduction to digital marketing and digital acquisition strategy.

Part 2: Website analysis: introduction to Google analytics and SEO tools.

Part 3: Search Engine Optimization Audit and optimization factors such as: social media, content management and netlinking, site architecture, SEO tags etc.

Part 4: Optimization proposal and SEO Key performance indicators.

Learning Outcomes:

When you have completed this module, you will be able to:

- Develop acquisition digital strategy – picking the right social media and advertising support.
- Analyze website structure and find SEO problems.
- Evaluate SEO problems.
- Choose appropriate digital plug-in tools.
- Set up an acquisition strategy for a business unit.
- Develop optimization strategies in order to drive traffic towards the company's website.

■ SIM

Simulation: 4-day business simulation

■ Information Systems

■ IS1

State of the Art in IT

➤ **IS1a: Digitalisation of the Enterprise**

Description:

The course aims to answer the following questions:

- What is the digital revolution: simple transition or paradigm shift?
- How does it impact organizations, business models, customer relationships, corporate culture?
- What are challenges, opportunities and threats of this new world?
- What are the 5 levers of digital transformation and how do they spread in the company's information system?

Learning Outcomes:

After completing this course, students should be able to:

- Understand the new rules of the game in a world where technology plays a predominant role.
- Identify keys to an efficient information system capable of delivering opportunities for the company.
- Know levers of the digital transformation.
- Position and evaluate a company's main IT applications.
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➤ IS1b: Data Analytics and Statistics

Description:

The main objective of this course is to introduce one of the flagship methodologies in applied statistics: scoring. The focus will be on the problems frequently encountered in companies while controlling data reliability, cleaning data, exploring data, creating insightful indicators, creating models, restitution of results to non-statisticians, etc.

Learning Outcomes:

After completing this course, students will be able to:

- know very quickly if a database is usable (long list of the first checks to be carried out)
- perform the first analyses to be done for a quick understanding of a database
- investigate data in a unitary way
- perform multivariate exploratory analysis
- roll out a scoring methodology (practical case)

➤ ISC1c Project Mgt. – Online Course (U Turku, Finland)

Description:

The course comprises weekly exercises in a virtual learning environment.

Each week, students are expected to take part in virtual discussions in small groups. They will focus on different topics in IS project management, including preparing project proposals, analysing IS project success and failure, as well as problems and challenges in different types of IS/IT projects, and the tasks and responsibilities of a project manager. Students are also expected to do a case study based on the knowledge of IS project management learned from the course. The term paper comprises an essay on an evaluation of an IS project case. The exercises are all carried out in a virtual learning environment. Students

participating in the course should ensure that they reserve sufficient time for the exercises during the course period.

Learning Outcomes:

After completing this course, students should be able to:

- Efficiently use the basic collection of skills, tools and methods to be used in managing (information systems) development projects.
- Understand the basic elements of project management in organisations.

➤ **IS1d: KxHub – Student-centred Knowledge Sharing Activity.**

■ IS2

Requirements Engineering

Description:

- The challenges of Requirements Engineering (R.E.)
- The role of R.E. in the software development process
- The R.E. process model

- Defining the goal and concept
- Defining vision and scope
- Stakeholder analysis
- Requirements elicitation
- Requirements analysis
- Use cases
- Requirements specification
- Non-functional requirements
- Project and product constraints
- Software requirements specification (SRS) document
- Requirements validation

Learning Outcomes:

- Describe the challenges involved in requirements engineering.
- Understand requirements engineering processes.
- Write a vision and scope document.
- Choose the right techniques in order to elicit requirements.
- Conduct a requirements elicitation interview.
- Understand the role of requirements analysis.

Understand the basic requirements types (functional, non-functional, constraints).

- Understand the importance of use cases and write a simple use case scenario.

- Choose, adapt and use the right SRS model.
- Know how to write effective functional requirements.
- Know the basic non-functional requirements types.

■ IS3

Introduction to Service Science (visiting professor: Masaryk Uni, Brno, CZ)

Description:

Service science, management, and engineering (SSME) is a term introduced by IBM to describe service science, an interdisciplinary approach to the study, design, and implementation of services systems – complex systems in which specific arrangements of people and technologies take actions that provide value for others. More precisely, SSME has been defined as the application of science, management, and engineering disciplines to tasks that one organization beneficially performs for and with another.

- Introduction.
- Goods and service dominant logic.
- Role of information in GDL and SDL.
- Service Systems and Imperfect information.
- Service system.
- Dual service system.
- Dynamic service system.
- IT in SDL.
- Software as a service.
- Marketing concepts in SDL.
- Service science, management and engineering.

Learning Outcomes:

Students will be able to:

- Recognize basic types of ERP and other information systems.
- Understand basic principles of Service Dominant Logic.
- Understand the service principles, including Software as a Service, Infrastructure as a service o IT as a Service.

■ IS4

Intro to SAP-ERP

Description:

- Introduction to SAP Self learning project Overview of the project Scenario.
- Overview of assessment documents Group assignment.

- Project oral presentation.

Learning Outcomes:

Students will be able to:

- Make a distinction between different modules of SAP.
- Explore the basics of the SAP Netweaver.
- Create a first project using SAP 's modules as Business Intelligence tools
- Implement SAP Business Intelligence using SAP Business Warehouse (BW) and or Business Object (BO).

■ IS5

Data Management for Business Decisions Making

Description:

Criticality of data is a given in today's business environment. As the amount of data collected is exploding, predictive applications and data products become key to the success of many organizations, but complex challenges arise in their practical creation and use:

1. Data Scientists are hard to find and hard to hire
2. The newest Big Data technologies are powerful, but difficult to combine and use efficiently
3. Data preparation is time consuming, often upwards of 80% of an entire project
4. Machine learning models developed in a test environment are rarely deployed into production

This course will address these business difficulties and instruct students on tackling these issues using a leading software solution.

Learning Outcomes:

When you have completed this course, you will be able to:

- Identify challenges, tools, concepts, and use cases for where data science, machine learning, and advanced analytics are necessary.
- Know the different types of machine learning algorithms and when they should be applied.
- Perform hands on data analysis on real world data sets.

■ IS6

General Data Protection Regulation

Description:

The General Data Protection Regulation (GDPR) is a critical regulation in today's digital age, ensuring the protection of personal data for individuals within the European Union. It grants individuals greater control over their personal information, imposes strict penalties on breaches, and requires transparency from organizations about data usage. The GDPR sets a global standard, emphasizing the importance of data privacy in the modern world.

Learning Outcomes

After completing this course, students should be able to:

- Understand the historical context and primary objectives of GDPR and its role in protecting individual data rights in the digital age.
- Assess the roles and responsibilities of data controllers and processors and recognize the rights granted to individuals under the regulation.
- Analyze real-world case studies to determine GDPR compliance, potential breaches, and the associated penalties.
- Develop strategies and best practices for implementing GDPR compliance within an organization.

IS7

Creative Leadership and Communication

Description

- Stimulate imagination, release creativity, think "out of the box";
- Develop "creative leadership & communication" skills: Vision, conviction, interaction, luck, transgression, risk taking, communication ..., to manage change.
- Produce innovative prototypes in line with managerial issues.

Learning Outcomes

At the end of the course, students should be able to:

- understand the drivers of creativity in the company and the artist's creative process,
- develop soft skills in creative leadership to support transformational

- increase agility in a context of uncertainty to drive change
- create your own "toolbox" of creativity & communication that can be brought back to your own context.

The French Touch

■ FLE

French as a Foreign language

Learning Outcomes:

When you have completed FLE1 and 2 you will be able to:

- Communicate orally with ease on basic topics and express your main ideas on more sophisticated topics.
- Develop contacts with the French student body.
- Read and understand documents, notices, correspondence, media etc.
- Write basic correspondence by mail, text or letter.
- Understand key elements of French culture and society.
- Use the necessary skills to obtain an internship in France.