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.

- ## OM

Operations Mgt.

Description: Operations management is the systematic direction and control of the processes that transform inputs into finished goods and services. The operations function comprises a significant percentage of the employees and physical assets in most organizations. Operations managers are concerned with each step in providing a service or product. They determine what equipment, labour, tools, facilities, materials, energy, and information should go into an operating system and how these inputs can best be obtained and used to satisfy the requirements of the market place. Managers are also responsible for critical activities such as: quality management and control, capacity planning, materials management, purchasing, and scheduling.

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.

Introduction to International Marketing
Description:
- What is marketing? Historical, contemporary and future view of E-marketing, community management, as well as green / predictive / viral / buzz / street marketing.
- Basics of international marketing. Strategic marketing. Market studies, benchmarking, customer analysis, segmentation, targeting, positioning, product management, branding, promotion, distribution, pricing, satisfaction and loyalty.
- Marketing of innovation.
- Specificities of international marketing.
- Political, legal, monetary and protectionism issues.
- Culture issues and adaptability.
- Competitive intelligence and lobbying.

Learning Outcomes:

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

- Understand the key role of marketing, particularly with the influence of ICTs.
- Understand how a marketing strategy is established.
- Comprehend the difference between B to B and B to C marketing policy.
- Implement and use the different tools of marketing analysis appropriately.
- Assess your own skill for marketing.
- Identify specificities of international marketing.
- Be capable of making a marketing plan.
- Be capable of taking the right decisions concerning segmentation, targeting, price and promotion, and branding.

▪ 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 netliking, 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.

▪ French Business Environment

A flexible module on French business, French business culture, CV book preparation, company visits, Seminars on different aspects of business and entrepreneurship, etc.

▪ 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.

➢ **IS1b: Document Management Systems**

Description:

Organizations had to physically archive all important documents leading to loss of data, more commercial property acquired for storage and unreliable search methods. Nowadays these same organizations can manage their documents differently. With a simple Document Management System, the same organizations can not only transform the physical documents to electronic ones saving money and time but also can be more efficient in their high customer interactions and can meet their compliance regulatory requirements.

Learning Outcomes:

After completing this course, students should be able to:

- Be familiar with when to use a DMS* (DMS scenarios).
- Know the components of a DMS
- Differentiate between ECM** ,BPM*** and EAI****
- Understand what dematerialization is
- Recognise the features of a DMS
- Use all important DMS terms Terms:

*DMS (Document Management System) **ECM (Enterprise Content Management)

***BPM (Business Process Management) ****EAI (Enterprise Application Integration)

➢ **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

Emerging Technologies
Description
- Hype cycle for emerging technologies.
- Technology foresight
- Small group project work on an IT-related "Emerging Technology".

Learning Outcomes
When you have completed this course, you will be able to:
- Identify the salient characteristics of Emerging Technologies.
- Identify their risks and opportunities, notably in the context of MIS.
- Critically assess potential new technologies, using appropriate methodologies.
- Present new alternatives in a succinct and coherent manner.
- Work cooperatively and effectively on a subject in which you may not have a lot of expertise.
- Use available resources (technical and human) more effectively.

▪ IS6

Business Intelligence (Data Modelling)
Description:
The goal of this course is to have a global overview of the Business Intelligence domain. The different actors, technologies and some solutions will be described. A focus will be made on a risk BI project around Basel II regulation. A Study case will be proposed to the students to make them work on a real BI project. They will have to retrieve the needs of some users, propose some reports or useful information to the user(s) and, finally, describe a data model with a cost and time schedule for implementation.

Learning Outcomes:
When you have completed this course, you will be able to:
- Understand BI in its institutional context.
- Understand the increasing importance of data within an organization.
- Think about a data model and how to work with it.
- Identify and report on key indicators.

Data Analytics
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.

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.