SUM12	BIG DATA: DATA ANALYTICS & VISUALIZATION
Course leader	Dong-Gil Ko, visiting professor from University of Cincinnati, United States https://business.uc.edu/faculty-and-research/departments/obais/faculty/dong-gil-ko.html
Course description	This class introduces students of all disciplines to Microsoft Power BI and its use as a data analytics and reporting tool. Topics will focus on the core building blocks of Power BI then gradually move into a development of sophisticated calculations using advanced functionalities. Through a balanced mix of lectures and hands-on sessions, students will be able to load data into Power BI, create simple visuals, create interactive reports, model large datasets, generate and deploy dynamic dashboards, and more. Multiple real-life business datasets will be used to gain hidden insights to aid in the discovery and creation of data-driven marketing strategies.
Course objectives	• Understand the importance and value of business intelligence solutions • Create automated reports to visualize key business metrics • Model, shape, and integrate data • Deploy reports to help you and others drive decision making • Develop basic proficiency with data analytics • Develop a data-driven marketing strategy
Tackled concepts	• Design a fully interactive Power BI reports with graphs, tables, filters, KPI's, and more • Perform data modeling and calculations on large real-life business datasets and share reports to organizational members • Overview of BI, Power BI Basics, Data Modeling, Query Editor, DAX, Time Intelligence, and more
Learning methods / Teaching procedures	Lectures, hands-on sessions, exercises *This class is intense. Daily attendance and participation is very important to maximize learning and perform well. Topic introductions are sequenced in a manner that build on materials covered from previous sessions.*
Assignments	Assignments (60%); Assessment (40%)
Bibliography / Course material	Requirement: Microsoft Power BI Desktop installed on your computer. Directions for how to install Microsoft Power BI Desktop on your computer will be provided. NOTE: Microsoft Power BI Desktop does **not** support Mac devices; therefore, Mac users should **not** enroll in this course. All other resources will be provided in class.
Number of credits	4 ECTS
Schedule	8 Sessions Seminar + 1 Session Assessment

Session	*Description*
1.	What is business intelligence?; Overview of BI Tools; Power BI Basics
2.	Building Interactive Reports
3.	Modeling Data in Power BI; DAX
4.	More DAX; Time Intelligence
5.	Data Modeling
6.	Advanced Calculations
7.	Reports Customization
8.	Assessment

*Courses listed are representative and subject to slight changes. The school reserves the right not to open a course where minimum participation is not reached or due to unforeseen circumstances.

9.	Deployment; Other Useful Features

TENTATIVE SCHEDULE

LIVE SESSIONS SCHEDULE

Monday			Tuesday			Wednesday			Thursday			Thursday Th.) / Friday (Fr.)		
Paris 9AM-noon	Seoul 5PM-8PM	Quito 3AM-6AM	Paris 9AM-noon	Seoul 5PM-8PM	Quito 3AM-6AM	Paris 9AM-noon	Seoul 5PM-8PM	Quito 3AM-6AM	Paris 9AM-noon	Seoul 5PM-8PM	Quito 3AM-6AM	Paris 6PM Th. – noon Fr.	Seoul 2AM Fr. - 8PM Fr.	Quito Noon Th. - 6AM Fr.
Live session Course Overview BI Introduction Power BI			Recorded session Data Modeling DAX Introduction Power BI			Recorded session Query Editor DAX Power BI			Independent work			Final Test : Take-home test		
1PM-4PM	9PM-midnight	7AM-10AM	1PM-4PM	9PM-midnight	7AM-10AM	1PM-4PM	9PM-midnight	7AM-10AM	1PM-4PM	9PM-midnight	7AM-10AM			
Recorded session Design, Formatting, Interactive Reports Power BI			Live session Time Intelligence Intro Power BI			Live session Advanced Calculations Power BI			Live session Deployment/Misc Power BI					
4PM-5PM	Midnight-12:30AM	10AM – 10:30AM	11:59PM	7:59AM	5:59PM	4PM-5PM	Midnight-12:30AM	10AM – 10:30AM	11:59PM	7:59AM	5:59PM			
Live chat			Deadline Project 1			Live chat			Deadline Project 2					

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