



# International Summer Programme

UAS Nysa 2023

**UNIVERSITY OF APPLIED SCIENCES IN NYSA  
INTERNATONAL SUMMER PROGRAMME 2023**

## **TITLE OF THE COURSE**

Business Intelligence

## **COURSE DESCRIPTION**

This course has the objective of preparing students for the advent of big data and analytics as a management resource in their organizations, against a background of the current wave of emerging technologies. Using current academic and practice-based readings and case studies, the course will examine the key issues in the establishment, utilization and maintenance of the necessary analytical tool framework and resources. While based primarily on academic articles and practice-based papers, which students will read and present as a summary to class, they will also be invited to identify potential big data sources that might be relevant to their current or expected organizations, and design an analytical implementation program to take advantage of the opportunities it provides, while identifying relevant problem areas. Students, working in teams, will develop and present a practical, business analytics proposal as part of the course.

## **Visiting professor:**

Prof. Geoffrey Dick, St John's University New York

## **Short bio information**

Dr. Geoffrey Dick currently teaches at St John's University in New York City. First appointed full Professor of Information Systems in 2009, he has taught in many universities in the United States and around the world. He has a particular interest in online education and its future, including how it might be affected by the Covid-19 pandemic. He teaches in a range of Information Technology areas including IT management, Cybersecurity, Emerging Technologies and Business Intelligence.

Geoff has taught and researched Information Systems for over 30 years. His research (over 100 publications) is mainly in the areas of telecommuting (his PhD) and on-line education – he is the recipient of the ICIS prize for best paper in education and was awarded the 2009 Emerald Management Review Citation of Excellence for one of the best papers published worldwide in the top 400 business journals. Recent publications have been in the CAIS, JITCAR, JISE and JITE-R. He has been a visiting fellow at UC Davis, the University of Malaya, the Tec de Monterrey in Mexico, University of Agder in Norway and has taught in the prestigious programs of the ESAN Summer School in Lima, Peru, the CETYS International Summer Program in Ensenada (where he holds a Foreign Professor appointment) and at ITAM in Mexico City.

**The course stage:** Bachelor

**Language of instruction:** English

**Duration:** 26th June – 7th July 2023

**Working time** (lesson hours – 45 min- a day): 4

**Number of ECTS credits:** 4

**Teaching Method:** lectures, group discussion, paper presentations by students, cases

### **Course Description:**

This course is designed for all students interested in the use of analytics to solve business problems and take advantage of opportunities. The advent of high-speed processing power, communications links and cheap storage have led to the use of data as an information asset – in particular of “big data”. Organizations using analytics as a form of business intelligence are outperforming their competitors who are not. However, problems and pitfalls abound. The course will look at ways to take advantage of this emerging technology for competitive advantage – indeed the survival of the organization. It will also look at ways to overcome some of the obstacles and impediments to successful implementation. Students participating in this course are expected to come from a wide range of specializations at their home universities – analytics is everywhere! They will identify analytics as a competitive strategy for use in modern organizations.

**The method of verification of the learning outcomes:** Class attendance and active participation: 20%; Student paper presentations and group projects: 40%; Final project: 40%

### **Course Content**

1.1 **Introduction**, overview of course, 1.2 Introduction to Business Analytics and Lessons from Industry so far. 1.3 Big Data – industry Use, Discussion on readings, preliminary thoughts on managing the function

2.1 **Types of Analytics**; 2.2 Data Scientists – who are they? How to recruit them? How to manage them?

3.1 The **role and responsibilities** of the Chief Data Officer

4.1 **Managerial Implications** from Data Technologies Interview with Data Analyst

5.1 The CAO and The CDO **Outsourcing** the Chief Data Officer and Analytics Functions

6.1 **Management issues**: Data Governance, 6.2 Ethical issues, 6.3 Security and privacy 6.4 Implications of the Internet of Things

7.1 **Responsibilities** of the IT Professional (and the data analyst!)

8.1 **Closing**: Course review, presentation preparation time and in team consultations 8.2 Team Presentations

**Any special prerequisites:** This course will be taught in English. It requires students to have proficiency in the English language allowing them to read and comprehend the required readings, write reports and compile presentations, understand the lectures presented, interact successfully with the instructors and fellow classmates, and engage effectively in class discussions and presentations.

### **Suggested literature:**

- Tableau “Six trends in Retail Analytics” 2017
- Davenport et al “How Big Data is Different”, Sloan 2012
- Davenport “Analytics 3.0”; HBR 2013
- Short and Todd, “What’s Your Data Worth?” Sloan 2017
- “The Big Data Talent Gap”;
- Harris and Mehrotra “Getting Value From Your Data Scientists”; Sloan 2014
- Power “Data science - supporting decision-making” DSS 2016
- Redman “Are You Ready for a Chief Data Officer?” HBR 2013
- Davenport and Redman “Great Data Teams” 2021
- Marchand and Peppard “Why IT fumbles Analytics”; HBR 2013
- Kearney “Big Data and the Creative Destruction of Today’s Business Models” Columbia 2022
- IBM “Insights for the New Chief Data Officer”, 2014
- O’Regan “Chief analytics officer: The ultimate big data job?” Computerworld 2014
- Bednarz “Major League Baseball” Network 2021
- Maras “IoT Security and Privacy”; Security and Privacy 2015
- Arias et al “IoT Wearables Privacy and Security”; IEEE 2015
- Andriole “Optimizing Operational and Strategic IT” IEEE 2015
- “You are now remotely controlled” NYT 2021
- “Spyware Wars” NYT 2022