

## Overview

This course is an introductory course with a dual focus: one focus on organizations and another focus on the individuals who work for them. At the individual level, we will examine how business decision making can be improved when supporting technologies like spreadsheets are leveraged. From the organizational perspective, we will cover strategic analysis frameworks and business strategies that can be fine-tuned for competition in an increasingly digitally transformed world.

## About this course

Humans are inherently limited in how they might approach problem solving because of the cognitive biases we all bring to decision situations. Understanding these biases and how to confront them using the spreadsheet modeling knowledge gained in this class will change the way you face and solve problems. We will cover practical decisions you will deal with in many different personal and professional business settings. You will build models in spreadsheet software that serve to help you analyze problem situations in a completely new light.

Organizations are undergoing major upheaval as required digital transformations are impacting everything from how customers pay for goods and services to how we interact with each other in an increasingly digital world. All areas of business are undergoing rapid change, and this change will continue throughout your lifetime. This course will provide you with strategic frameworks to help you understand digital transformation and how today's companies are and will change in order to remain competitive. You will learn to analyze industries and the companies in them with an eye towards strategic prospects and potential setbacks. You'll learn new ways to think about businesses using advanced digital transformation strategic lenses that let you peer into industry rivalry, supplier and customer power and other important determinants. After this course, you will look at businesses and how they compete in an entirely new way.

As a first course in business, you will be immersed in a world where some jobs are being eliminated and new ones are being added in a process known as creative destruction. Just around the corner for the world economy will be the emergence of artificial intelligence (AI) technologies. AI will disrupt industries and will require major strategic change in established companies. It will also provide opportunities for new business ideas and entrepreneurship. The dual focus in this course – on individuals and organizations – will provide you with the background needed to make important decisions about choosing a possible career in business and/or information systems.

## Required prior knowledge and skills

To be successful in this course, we recommend English language fluency and computer literacy. Knowledge of basic Excel functionality will also be very helpful in setting you up for success in this course.

## Learning Outcomes

You will learn:

- A dual focus approach to study information systems from both tactical and organizational viewpoints in order to advance a broad understanding of digital transformation's impact on people, business processes and organizational strategy
- The limitations cognitive biases can inflict on individuals, and learn how business decision making can be enhanced through judicious leveraging of supporting technologies that enable leading- edge modeling and analysis
- How to describe industry competition in an age of digital transformation using frameworks and constructs that enable a fundamental level of competitive strategy analysis
- How to debate how well-positioned digitally transforming industry competitors are for sustained advantage by applying concepts and contexts related to platforms and competition in two-(or more)-sided platform-based market spaces
- How to leverage this first course in business to understand the exciting career paths available now – and those that may be created as digital transformation continues at break-neck pace

## Additional Info

This course is worth 3 credit hours toward the Computer Science (CS) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring the credit.

## Creator



**Dr. Michael Goul**

The late Michael Goul was the Associate Dean for Faculty and Research and a professor at the W. P. Carey School of Business at Arizona State University. He was an affiliated faculty member for both ASU's Institute for Social Science Research and the Global Security Initiative, and he served on the Biodesign Institute's Internal Advisory Board. In the W.P Carey School, Professor Goul led faculty and department affairs and initiatives to advance faculty excellence. In addition, he oversaw the school's portfolio of research centers, coordinated the school's doctorate program, and represented the school on university research initiatives such as those associated with advanced analytics. He served as chair of the school's Department of Information Systems. As chair, Professor Goul spearheaded the development of the nine-month Master of Science in Business Analytics program, and he

administered the launch of the school's undergraduate Bachelor of Science in Business Data Analytics degree. Professor Goul also administered the launch of the online version of W.P Carey's highly successful Master's of Science in Information Management program.

Professor Goul was passionate about how the concomitant explosion of big data, the shift to cloud computing and the emergence of the mobile/social web does and will impact the global economy. His most recent research efforts were in the area of big data, IoT and data science governance, fog computing and analytics/data sharing contracts. In the summer of 2016, Professor Goul was recognized with the Outstanding Leadership Award by the IEEE Computer Society Technical Committee on Services Computing. He published more than 100 articles, authored cases, and he conducted analytics research at companies including American Express, eBay, Intel, and Teradata.

## Professor



Hina Arora is a Clinical Assistant Professor and Director of Experiential Analytics in the W. P. Carey School of Business at Arizona State University. Prior to joining ASU, Hina was a Group Manager at Microsoft, where she led Analytics teams in the Windows Services Division and the US Central Marketing Organization. She has also held Software Development positions at IBM and Cognizant, and worked as a Research Scientist at the Center for Excellence in Document Analysis and Recognition at SUNY Buffalo. Hina has a PhD in Information Systems, a Masters' degree in Electronics Engineering, and an Undergraduate degree in Physics.