Computer Applications and Information Technology

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 THE 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.

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

*This course is worth 3 credit hours toward the Computer Science (CS) General Studies requirement at Arizona State University.*