This course is devoted to the study of the strategic use of information and the related role of information technology. It is designed for students who want to manage and compete in technology-intensive businesses. Heavy emphasis is placed on utilizing information economics to analyze businesses in information-intensive industries. Technology skills are not required, although a background in information technology management, strategic management or managerial economics is helpful.

If “software is eating the world”, then a new view of economics is needed to understand how pricing, competition, and markets will change as more of the economy is digitized. We will study information-based industries like digital media, social networks, financial services, and online retail as well as traditional businesses that are being changed by new digital capabilities. There are four broad themes for the course: the economics of information goods and services, information and consumer behavior, markets and market design, and network economics. Each day we will discuss a core topic in one or more of these themes, with an emphasis on bridging theoretical ideas to real world applications. Application topics might include applying artificial intelligence, platform economics, and cryptocurrencies.

The course is likely to be especially useful for students interested in working in the information economy. For those interested in becoming consultants, business technologists and analysts (e.g. product managers or technology management roles), analysts of various types, and entrepreneurs this course will introduce critical frameworks for understanding the economics of competing in digital business.
Course Format

Preparation and Readings: The majority of the work in the course is preparing by doing the readings and coming to class ready to discuss the ideas in the readings. For each session there will be a reading guide posted on Canvas listing required (and in some cases, optional) readings from academic, trade, and popular sources. There will also be a couple guest speakers and exercises derived from the readings. There is no required textbook.

In order to guide some of the discussion, each “topic”-based session (most sessions with the exception of the first and last days of class) will have a short, graded memo assignment due the evening before the start of class. Each student’s two lowest memo assignment grades will be dropped.

There will also be a final quiz and a course project where you will have the opportunity to explore a question related to digital economics. This assignment is largely unconstrained but requires you to a) Define an interesting question related to the digital economy, and b) Answer it with rigor.

The course grade will be based roughly equally on a) memos, b) final quiz, c) final project, d) class participation

Topics

A preliminary topic list is as follows (this will be adjusted based on the schedule and student interest):

- Pricing Information Goods, Bundling and Versioning
- Markets and Market Design
- Information Economics Fundamentals: Moral Hazard and Adverse Selection
- Network Economics
- Platforms
- Auctions
- Automation and Artificial Intelligence
- Future of Work
- Privacy and Security
- Competition in the Digital Economy/Antitrust