

The real estate enterprise more and more is driven by technology from end to end. What's more, real disruption from technology has yet to occur in real estate. There are movements, but no clear big thing yet. The technology that drives the real estate enterprise covers a wide space, from the systems in the buildings that run the plant and allow visitors in the building, to the operational systems for leasing, management and construction, to the billing, accounting and corporate reporting systems that drive acquisitions and investor reporting.

This course will cover at a high level a number of aspects of the space. We will cover conceptual issues in data processing, networks and design, as understanding the "data transport layer" at a high level is important, particularly in a world where the cloud will ultimately dominate where applications will be housed.

The space is made up of a wide variety of systems that provide niche portions of the functionality required in the enterprise. We will spend time covering the various sectors of the space, identifying the current players in each sector. This will provide a good perspective in understanding the state of the industry and possible areas where innovation may (or should) arrive. We will have a number of the technology vendors come and speak about what they see as challenges and opportunities in the space.

We will examine the real estate data model which is interesting as compared to other industries. The real estate industry has a data model which is extremely complex but does not contain a glut of data itself. The complexity of the data points in a lease and their impact on the relationship with the customer make it important to cover this topic.

We will look at understanding the various systems at a high level both to see the data model in action and cover the integration needs between the disparate systems that run the enterprise. The "stack" of software that runs a particular enterprise requires careful integration or inefficiencies grow quickly.

Finally, we want to try to figure out is/are the disruptor(s) among us, or what they might look like. Real estate has always been a laggard industry in technology (hard assets, moves slowly). This may in fact give us an advantage; having seen other industries moved and moving might give an opportunity to make a more educated guess at what is to come.

Prerequisites, Requirements and Assignments

This is mostly a discussion course, there are no prerequisites. Attendance is therefore mandatory. A course outline describes what will be covered each week, each week covering a different aspect or topic. There will be supporting materials provided, and there may be a little research in advance of the class.

Participation in class is important, as it is best if the lectures are interactive and steered by particular interests of the students. There is no basic technology knowledge requirement as we will not go that deep, but it is probably best that the student has an interest and curiosity in how the gears turn that run the enterprise.

Each student will pick a topic which we will assist in curating to do a more extensive project. The project is due at the end of the semester and will be a significant part of the grade. The project can be varied from an extensive survey of a product or group of products, to mock up designs of systems, to training and usage of various software products.