**BAIS:3020 - Computational Thinking:**

Coding or programming is considered a must-have job skill for business and other professionals. However, it is much more than that. Coding is a way of thinking about problems and solving them with the use of computers. Python is one of the most popular languages for writing general-purpose programs. In this class, we learn to solve problems by writing Python programs.

**Students will learn:**

* Anaconda programming environment
* Python programming language, including:
  + Variables and functions
  + Loops and logic
  + String manipulation
  + Structured types
  + Dictionaries
  + Exceptions
  + Object oriented programming
  + Plotting
  + Libraries

**Students will be able to:**

* Write robust Python applications that utilize multiple functions
* Solve problems using techniques such as exhaustive enumeration, approximation, and bisection search
* Scrape web pages for data
* Perform text analytics on data
* Produce visualizations
* Process images