

[Stellic Degree Planner](#)
[Schedule of Classes](#)

Analytics Concentration

Requirements:
 1 x Big Data
 1 x Machine Learning
 1 x Software Systems

- 10-605 Machine Learning with Large Data Sets
- 10-745 Scalability in Machine Learning
- 10-805 Machine Learning with Large Data Sets
- 11-741 Machine Learning for Text Mining
- 11-775 Large-Scale Multimedia Analysis
- 11-777 Multimodal Machine Learning

- 10-701 Introduction to Machine Learning (Ph.D.)
- 10-703 Deep Reinforcement Learning & Control
- 10-707 Topics in Deep Learning
- 10-708 Probabilistic Graphical Models
- 10-715 Advanced Introduction to Machine Learning
- 10-716 Advanced ML: Theory & Methods
- 10-725 Convex Optimization
- 11-641 Machine Learning for Text Mining
- 11-661 Language and Statistics
- 11-741 Machine Learning for Text Mining
- 11-755 Machine Learning for Signal Processing
- 11-761 Language and Statistics
- 11-777 Multimodal Machine Learning
- 11-785 Introduction to Deep Learning
- 36-705 Intermediate Statistics
- 36-708 Statistical Methods in Machine Learning

- 11-642 Search Engines
- 11-747 Neural Networks for NLP
- 11-775 Large-Scale Multimedia Analysis
- 11-777 Multimodal Machine Learning
- 11-797 Question Answering

Big Data

Machine Learning

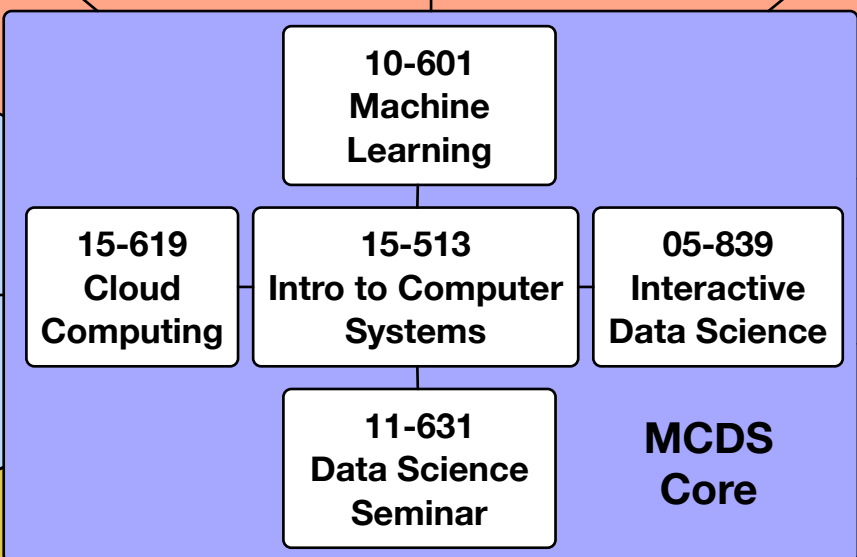
Software Systems

Systems Concentration

Requirements:
 3 x Systems Project

- 15-605 Operating Systems Implementation
- 15-618 Parallel Computer Arch. & Programming
- 15-640 Distributed Systems
- 15-641 Computer Networks
- 15-645 Database Systems
- 15-712 Adv. and Distributed Operating Systems
- 15-719 Advanced Cloud Computing
- 15-721 Advanced Databases
- 15-746 Advanced Storage Systems
- 15-821 Mobile and Pervasive Computing

Systems Projects



Capstone Requirement

Capstone Requirement
 Capstone Planning Seminar
 Internship
 2 x Capstone Courses

- 11-634 Capstone Planning Seminar
- 11-630 Internship
- 11-632 Data Science Capstone
- 11-635 Capstone Research

Human-Centered Data Science Concentration

Requirements:
 1 x Research Methods
 2 x HCI

Research Methods

- 05-610 User Centered Research and Evaluation
- 05-816 Applied Research Methods

Human-Computer Interaction

- 05-820 Social Web
- 05-823 E-Learning Design Principles and Methods
- 05-833 Gadgets, Sensors & Activity Recognition
- 05-836 Usable Privacy and Security
- 05-840 Tools for Online Learning
- 05-872 Rapid Prototyping of Computer Systems
- 05-891 Designing Human Centered Software
- 05-899 Special Topics in HCI