# Area Courses
## Data Science and Engineering: Infrastructure and Applications

### Data Science Infrastructure
- **EE 542** Internet and Cloud Computing
  - 4 units
  - EE 457
- **CSCI 551** Computer Networking
  - 4 units
- **EE 561** Foundations of Artificial Intelligence
  - 4 units
- **EE 565** Information Theory and Its Application to (Big) Data Sciences
  - 4 units
- **CSCI 570** Analysis of Algorithms
  - 4 units
- **CSCI 585** Database Systems
  - 4 units

### Signal Data Analytics
- **EE 483** Introduction to Digital Signal Processing
  - 4 units
- **EE 592** Computational Methods for Inverse Problems
  - 4 units
  - EE 483, EE 510
- **EE 596** Wavelets and Graphs for Signal Processing and Machine Learning
  - 4 units
  - EE 483, EE 510

### Visual Data Analytics
- **EE 569** Introduction to Digital Image Processing
  - 4 units
  - EE 503
- **CSCI 677** Advanced Computer Vision
  - 4 units

### Speech and Language Data Analytics
- **EE 519** Speech Recognition and Processing for Multimedia
  - 3 units
  - EE 483
- **EE 619** Advanced Topics in Automatic Speech Recognition
  - 3 units
  - EE 503, EE 519, CSCI 544
- **CSCI 544** Applied Natural Language Processing
  - 4 units

### Legend
- **EE 000** Course Title
- Course Units
- Recommended Prep.
- Prerequisite Courses
- Corequisite Courses

This chart shows course relationships. Please check the University Catalogue for specific course details including any recommended preparatory courses and Degree Requirements.