# Area Courses
## Signal and Image Processing

### Fundamental Courses
- **EE 441** Applied Linear Algebra for Engineering
- **EE 483** Introduction to Digital Signal Processing
- **EE 503** Probability for Electrical and Computer Engineers

### Signal Processing
- **EE 583** Statistical Signal Processing
  - Corequisite: EE 503
- **EE 667** Array Signal Processing
  - Corequisite: EE 562
- **EE 596** Wavelets
  - Prerequisites: EE 441, EE 483

### Image Processing
- **EE 569** Introduction to Digital Image Processing
- **EE 669** Multimedia Data Compression

### Data Analysis
- **EE 500** Neural and Fuzzy Systems
- **EE 518** Mathematics and Tools for Financial Engineering
- **EE 559** Mathematical Pattern Recognition
- **EE 566** Optical Information Processing
  - Corequisite: EE 441, EE 503
- **EE 563** Estimation Theory
- **EE 560** Machine Learning from Signals: Foundations and Methods
  - Corequisite: EE 441, EE 503

### Applications
- **EE 519** Speech Recognition and Processing for Multimedia
  - Corequisite: EE 483
- **EE 523** Advanced Biomedical Imaging
  - Corequisite: EE 483
- **EE 586L** Advanced DSP Design Laboratory
  - Corequisite: EE 583 or EE 569
- **EE 591** Magnetic Resonance Imaging and Reconstruction
  - Corequisite: EE 483
- **EE 619** Advanced Topics in Automatic Speech Recognition
  - Corequisite: EE 503, EE 519, CSCI 544

### Mathematical Foundations
- **EE 512** Stochastic Processes
  - Corequisite: EE 441, EE 503
- **EE 517** Statistics for Engineers
- **EE 562** Random Processes in Engineering
  - Corequisite: EE 441, EE 503

### Legend
- **EE 000** Course Title
- **EE 000** Prerequisite Courses
- **EE 000** Corequisite Courses

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