Area Courses
Data Science and Engineering

Fundamental Courses

CSCI 455x Introduction to Programming Systems Design

EE 503 Probability for Electrical and Computer Engineers

EE 510 Linear Algebra for Engineering

Data Science Infrastructure

EE 542 Internet and Cloud Computing

EE 450 or EE 457

CSCI 551 Computer Communications

CSCI 402, EE 450

EE 553 Computational Solution of Optimization Problems

EE 510

EE 565 Information Theory and Compression

EE 503

CSCI 570 Analysis of Algorithms

CSCI 585 Database Systems

Machine Learning

EE 500 Neural Learning and Computational Intelligence

EE 483, EE 503, EE 510

EE 559 Mathematical Pattern Recognition

EE 503, EE 510

EE 546 Mathematics of High-Dimensional Data

EE 503, EE 510

EE 660 Machine Learning from Signals: Foundations and Methods

EE 503, EE 510, EE 559

Statistical Methods for Data Analytics

EE 517 Statistics and Data Analysis for Engineers

EE 503

MATH 541a Introduction to Mathematical Statistics

EE 563 Estimation Theory

EE 503

EE 583 Statistical Signal Processing

EE 503

Signal Data Analytics

EE 483 Introduction to Digital Signal Processing

EE 592 Computational Methods for Inverse Problems

EE 483, EE 510

EE 503

EE 596 Wavelets and Graphs for Signal Processing and Machine Learning

EE 483, EE 510

Visual Data Analytics

EE 569 Introduction to Digital Image Processing

EE 503

EE 669 Multimedia Data Compression

EE 503

CSCI 677 Advanced Computer Vision

Speech and Language Data Analytics

EE 519 Speech Recognition and Processing for Multimedia

EE 483

CSCI 544 Applied Natural Language Processing

EE 619 Advanced Topics in Automatic Speech Recognition

EE 503, EE 519, CSCI 544

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

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