Track 7: Signal Processing for Pattern Recognition and Machine Learning

**Semester I (Fall)**

**EE 441** Applied Linear Algebra for Engineering (3, FaSpSm) Prerequisite: MATH 445

**EE 464** Probability Theory for Engineers (3, FaSpSm) Prerequisite: EE 301 and MATH 445

**Recommended Courses I**

**EE 401** Transform Theory for Engineers (3, FaSp) Prerequisite: EE 301, MATH 445

**EE 483** Introduction to Digital Signal Processing (3, FaSp) Prerequisite: EE 301

**EE 569** Introduction to Digital Image Processing (3, FaSp) Recommended preparation: EE 401, EE 464

**One from Recommend Courses I**

**Two from Recommend Courses II**

**Recommended Courses II**

**EE 483** Introduction to Digital Signal Processing (3, FaSp) Prerequisite: EE 301

**EE 517** Statistics for Engineers (3, Sp) Recommended preparation: EE 464

**EE 553** Computer Solution of Optimization Problems (3, sp) Prerequisite: EE 441

**EE 562a** Random Processes in Engineering (3, FaSpSm) Prerequisite: EE 441, EE 464

**EE 569** Introduction to Digital Image Processing (3, FaSp) Recommended preparation: EE 401, EE 464

**Semester II (Spring)**

**EE 559** Mathematical Pattern Recognition (3, Sp) Prerequisite: EE 464; Corequisite: EE 441

**Recommended Courses III**

**EE 500** Neural and Fuzzy Systems (3) Recommended preparation: EE 464

**EE 519** Speech Recognition and Processing for Multimedia (3, Fa) Prerequisite: EE 483.

**EE 569** Introduction to Digital Image Processing (3, FaSp) Recommended preparation: EE 401, EE 464

**EE 596** Wavelets (3, Fa) Prerequisite: EE 483; EE 441, Recommended preparation: EE 569, MATH 570a

**Semester III (Fall)**

**At least one of:**

**EE 563** Estimation Theory (3, Fa) Prerequisite: EE 562a

**CSCI 567** Machine Learning (3) Recommended preparation: an undergraduate-level course in AI

**The remainder of your 3 courses from Recommended Courses III**

**SIPI**

**USC**