

## Big Data Systems Track Degree Audit Sheet

### Core Requirement (21 credit hours)

Statistical Methods (3 cr.)	AI and Machine Learning for Engineering (6 cr.)	
SPEA-V 506 Statistical Analysis for Effective Decision-making	CSCI-B 555 Machine Learning	
STAT-S 520 Introduction to Statistics • Students who have completed equivalent prior coursework in statistics can opt to take an additional elective in lieu of one of the Statistical Methods courses	CSCI-B 565 Data Mining	
<b>Big Data, Cloud Computing, and Visualization (3 cr.)</b>	CSCI-B 561 Advanced Database Concepts	
CSCI-B 561 Advanced Database Concepts	ENGR-E 511 Machine Learning for Signal Processing	
ENGR-E 516 Engineering Cloud Computing	ENGR-E 533 Deep Learning Systems	
ENGR-E 522 HPC and Cloud Computing for Large Scale Image Applications	ENGR-E 536 High Performance Graph Analytics	
ENGR-E 534 Big Data Applications	<b>Core Engineering (3 cr.)</b>	
ENGR-E 583 Information Visualization	ENGR-E 503 Introduction to Intelligent Systems	
ENGR-E 584 Scientific Visualization	ENGR-E 517 High Performance Computing	
ENGR-E 616 Advanced Cloud Computing	ENGR-E 535 Image Processing for Medical Applications	
ENGR-E 623 Applied Streaming Data Systems	ENGR-E 551 Simulating Nanoscale Systems	
<b>Electives (9 credit hours)</b>		