DATA ENGINEERING CONCENTRATION

CSC 365  Introduction to Database Systems  4
CSC 366  Database Modeling, Design and Implementation  4
CSC 436  Mobile Application Development  4
or CSC 437  Dynamic Web Development
or CSC 309  Software Engineering II
CSC 466  Knowledge Discovery from Data  4
CSC 468  Database Management Systems Implementation  4
or CSC 469  Distributed Systems

Select from the following:  
CPE/EE 428  Computer Vision  4
CSC 369  Introduction to Distributed Computing
CSC 400  Special Problems  2
CSC 468  Database Management Systems Implementation
CSC/CPE 469  Distributed Systems
CSC 480  Artificial Intelligence
CSC 482  Speech and Language Processing
CSC 487  Deep Learning
CSC 560  Database Systems
CSC 566  Topics in Advanced Data Mining
CSC 569  Distributed Computing

Mathematics/Statistics Elective
Select from the following:  4
MATH 241  Calculus IV
MATH 248  Methods of Proof in Mathematics
MATH 306  Linear Algebra II
MATH 335  Graph Theory
MATH 336  Combinatorial Math
MATH 437  Game Theory
MATH 470  Selected Advanced Topics
STAT 323  Design and Analysis of Experiments I
STAT 324  Applied Regression Analysis
STAT 330  Statistical Computing with SAS
STAT 331  Statistical Computing with R
STAT 334  Applied Linear Models
STAT 416  Statistical Analysis of Time Series
STAT 418  Categorical Data Analysis
STAT 419  Applied Multivariate Statistics
STAT 434  Statistical Learning: Methods and Applications

Total units  28

1 An additional 4 units of CPE/CSC Technical Electives is needed if CPE/CSC 123 is not taken in the major.
2 Up to 4 units may be taken from CSC 400.