DATA ENGINEERING CONCENTRATION

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	4
	Implementation	
or CSC 469	Distributed Systems	
Select from the foll	owing: ¹	4
CPE/EE 428	Computer Vision	
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/Stati	stics Elective	
Select from the foll	owing:	4
MATH 241	Calculus IV	
MATH 248	Methods of Proof in Mathematics	
MATH 306	Linear Algebra II	
MATH 334	Combinatorial Math	
MATH 335	Graph Theory	
MATH 437	Game Theory	
MATH 470	Selected Advanced Topics	
STAT 305	Introduction to Probability and Simulation	
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		24

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.