CSCI-MS
Graduate Track/Specialty Area
Worksheet

Name of Track: Data Management & Analysis

Faculty Member(s) using track: Bill Buckles, Cornelia Caragea, Yan Huang, Rodney Nielsen, JungHwan Oh, Xiaohui Yuan

Required Courses for all Tracks: *3 credits (Algorithms) are required for all CSCI tracks.*

Course Number	Course Name	Credits	Semester Taken
CSCE 5150	Analysis of Computer Algorithms	3	

Track Core Courses: *Each track will require a minimum of 9 credits to be chosen from a list of at least 3 courses. This list may include specific courses that students must take, provide a choice between a short list of courses, or any combination thereof.*

Core Courses Required: 4

Course Number	Course Name	Credits	Semester Taken
CSCE 5216	Pattern Recognition	3	
CSCE 5350	Database Systems I	3	
CSCE 5360	Database Systems II	3	
CSCE 5370	Distributed and Parallel Database Systems	3	
CSCE 5380	Data Mining	3	
CSCE 6350	Advanced Database Design	3	
CSCE 6370	Multimedia Database Systems	3	

Track Supporting Courses: *Tracks are expected to provide a list of supporting courses. Tracks may require a student to take courses from the supplemental list based on the following:*

- *for thesis option: The maximum number of required courses across the track (**core and supporting**) should not exceed 15 credits (not including thesis). For MS with thesis, the total number of hours required is 30. This leaves a minimum of 6 credit hours free for the student to choose. One 6000 level course must be included on your degree plan.*
- *for course option: The maximum number of required courses across the track (**core and supporting**) should not exceed 21 credits. For MS without thesis, the total number of hours required is 36. This leaves a minimum of 12 credit hours free for the student to choose. One 6000 level course must be included on your degree plan.*

Supporting Courses Required: 1/3 (***may include core courses not selected)***

Course Number	Course Name	Credits	Semester Taken
CSCE 5170	Graph Theory for Computer Scientists	3	
CSCE 5200	Information Retrieval and Web-Search	3	
CSCE 5210	Artificial Intelligence	3	
CSCE 5213	Modeling and Simulation	3	
CSCE 5215	Machine Learning	3	
CSCE 5225	Digital Image Processing	3	
CSCE 5270	Computer-Human Interfaces	3	
CSCE 5933	Multimedia Computing	3	
CSCE 5450	Programming Languages	3	
CSCE 5640	Operating System Design	3	
CSCE 6260	Adv Pattern Recognition and Image Processing	3	

Total Required Courses for Track/Specialty Area: 6/8